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core products
CATALOG

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Industrial Automation

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90 YEARS ANNIVERSARY

Omron Automation is an industrial automation partner that creates, sells, and services complete automation solutions that include sensing, control, safety, vision, motion, robotics and more.

Established in 1933, Omron's 30,000 employees help businesses solve problems with creativity in more than 110 countries. Our flexible, customizable solutions successfully tackle challenges across industries, whether these be a need for high-performance machines in food and beverage packaging or plant-wide traceability in automotive manufacturing.

As a total solutions provider, we carry a rich and diverse portfolio of automation technologies. From sensors, barcode readers, and control panel components to powerful vision systems, collaborative and mobile robots, and programmable logic controllers, our offering can be used to solve nearly any application in any industry.

To help you navigate our wide-ranging portfolio and home in on the specific products needed for your application, we have developed this core product guide that presents our most popular technologies in a clear and concise format.

Learn more ›

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Our Mission: To improve lives and contribute to a better society

90+ ↑
Years automation
experience

350
Offices in
117 countries

5.9 ↑
Billion USD
annual sales

Contents

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E2E Next - Long Range DC 3 Wire Inductive Sensors

- Industry leading sensing distances with up to 4x the sensing range of standard models
- IO-Link is standard with DC 3-wire PNP models Multiple connection Types
- Multiple connection Types (including M8 QD, M12 QD, M12 Pig-tail QD, PVC cable and PVC Robot Cable)
- Harsh condition robustness with IP67, IP69K, and IP67G

🌐 Product Page   📹 Product Video

Barrel Size	Sensing Distance	Shielded /Unshielded	Connection Method	PNP Model	NPN Model
M8	1.5 mm	Shielded	M8 Connector (3 pins)	E2E-X1R5B1D8-M5	E2E-X1R5C18-M5
	2mm			E2E-X2B1D8-M5	E2E-X2C18-M5
	4mm			E2E-X4B1D8-M5	E2E-X4C18-M5
	1.5 mm		M12 Pigtail*	E2E-X1R5B1D8-M1TJ 0.3M	E2E-X1R5C18-M1TJ 0.3M
	2mm			E2E-X2B1D8-M1TJ 0.3M	E2E-X2C18-M1TJ 0.3M
	4mm			E2E-X4B1D8-M1TJ 0.3M	E2E-X4C18-M1TJ 0.3M
	2 mm	Unshielded	M8 Connector (3 pins)	E2E-X2MB1D8-M5	E2E-X2MC18-M5
	4mm			E2E-X4MB1D8-M5	E2E-X4MC18-M5
	8mm			E2E-X8MB1D8-M5	E2E-X8MC18-M5
	2 mm		M12 Pigtail*	E2E-X2MB1D8-M1TJ 0.3M	E2E-X2MC18-M1TJ 0.3M
	4mm			E2E-X4MB1D8-M1TJ 0.3M	E2E-X4MC18-M1TJ 0.3M
	8mm			E2E-X8MB1D8-M1TJ 0.3M	E2E-X8MC18-M1TJ 0.3M
M12	2 mm	Shielded	M12 Connector (4 pins)	E2E-X2B1D12-M1	E2E-X2C112-M1
	4mm			E2E-X4B1D12-M1	E2E-X4C112-M1
	9mm			E2E-X9B1D12-M1	E2E-X9C112-M1
	5 mm	Unshielded		E2E-X5MB1D12-M1	E2E-X5MC112-M1
	8mm			E2E-X8MB1D12-M1	E2E-X8MC112-M1
	16mm			E2E-X16MB1D12-M1	E2E-X16MC112-M1
M18	5 mm	Shielded		E2E-X5B1D18-M1	E2E-X5C118-M1
	8mm			E2E-X8B1D18-M1	E2E-X8C118-M1
	14mm			E2E-X14B1D18-M1	E2E-X14C118-M1
	10 mm	Unshielded		E2E-X10MB1D18-M1	E2E-X10MC118-M1
	16mm			E2E-X16MB1D18-M1	E2E-X16MC118-M1
	30mm			E2E-X30MB1DL18-M1	E2E-X30MC1L18-M1
M30	10 mm	Shielded		E2E-X10B1D30-M1	E2E-X10C130-M1
	15mm			E2E-X15B1D30-M1	E2E-X15C130-M1
	23mm			E2E-X23B1D30-M1	E2E-X23C130-M1
	18 mm	Unshielded		E2E-X18MB1D30-M1	E2E-X18MC130-M1
	30mm			E2E-X30MB1DL30-M1	E2E-X30MC1L30-M1
	50mm			E2E-X50MB1DL30-M1	E2E-X50MC1L30-M1

Note: Models shown are normally open, normally closed options are available.
   * 0.3M pre-wired with 4 pin M12 connector on the end.
   Tables include representative part numbers. Please consult the product page for more details.

E2EW -
Metal Face Proximity Sensors

- Extended sensing range, models from 1x to 4x standard sensing range
- Factor 1 sensing of ferrous and non-ferrous metals
- Weld field immunity
- IP67 rating for environmental robustness
- Proprietary slag resistance coating
- IO-link configurability and output monitoring

🌐 Product Page   🎥 Product Video

DC 3-Wire Standard Metal Body

Connection	Sensing Range	Size	Sensing Distance	PNP	NPN
M12 pigtail*	4X	M12	7 mm	E2EW-X7B1T12-M1TJ 0.3M	E2EW-X7C112-M1TJ 0.3M
		M18	12 mm	E2EW-X12B1T18-M1TJ 0.3M	E2EW-X12C118-M1TJ 0.3M
		M30	22 mm	E2EW-X22B1T30-M1TJ 0.3M	E2EW-X22C130-M1TJ 0.3M
2m Cable		M12	7 mm	E2EW-X7B1T12 2M	E2EW-X7C112 2M
		M18	12 mm	E2EW-X12B1T18 2M	E2EW-X12C118 2M
		M30	22 mm	E2EW-X22B1T30 2M	E2EW-X22C130 2M

DC 3-Wire Metal Body with Spatter Resistant Coating

Connection	Sensing Range	Size	Sensing Distance	PNP	NPN
M12 pigtail*	4X	M12	7 mm	E2EW-QX7B1T12-M1TJ 0.3M	E2EW-QX7C112-M1TJ 0.3M
		M18	12 mm	E2EW-QX12B1T18-M1TJ 0.3M	E2EW-QX12C118-M1TJ 0.3M
		M30	22 mm	E2EW-QX22B1T30-M1TJ 0.3M	E2EW-QX22C130-M1TJ 0.3M
M12 4pin		M12	7 mm	E2EW-QX7B1T12-M1	E2EW-QX7C112-M1
		M18	12 mm	E2EW-QX12B1T18-M1	E2EW-QX12C118-M1
		M30	22 mm	E2EW-QX22B1T30-M1	E2EW-QX22C130-M1
M12 Pigtail	2x	M12	3 mm	E2EW-QX3D112-M1TGJ 0.3M	—
M12 Pigtail		M18	7 mm	E2EW-QX7D118-M1TGJ 0.3M	—
M12 Pigtail		M30	12 mm	E2EW-QX12D130-M1TGJ 0.3M	—
2m Cable		M12	3 mm	E2EW-QX3D112 2M	E2EW-QX3D212 2M
2m Cable		M18	7 mm	E2EW-QX7D118 2M	E2EW-QX7D218 2M
2m Cable		M30	12 mm	E2EW-QX12D130 2M	E2EW-QX12D230 2M

DC 2-Wire Standard Metal Body

Connection	Sensing Range	Size	Sensing Distance	PNP	NPN
M12 Pigtail	2x	M12	3 mm	E2EW-X3D112-M1TGJ 0.3M	—
M12 Pigtail		M18	7 mm	E2EW-X7D118-M1TGJ 0.3M	—
M12 Pigtail		M30	12 mm	E2EW-X12D130-M1TGJ 0.3M	—
2m Cable		M12	3 mm	E2EW-X3D112 2M	E2EW-X3D212 2M
2m Cable		M18	7 mm	E2EW-X7D118 2M	E2EW-X7D218 2M
2m Cable		M30	12 mm	E2EW-X12D130 2M	E2EW-X12D230 2M

E3Z - Compact Photoelectric Sensor

- General purpose photoelectric family with all common sensing modes at long range
- Minimal optical axis deviation for easy alignment
- IP67 for water resistance
- Intensive shielding for highest noise immunity (EMC)
- Multiple molding housing for high mechanical resistance

🌐 Product Page

Sensor Type	Sensor Distance	Connection	PNP Model	NPN Model
Through-beam (emitter+receiver)	10m (Red LED)	2m Cable	E3Z-T81A	E3Z-T61A
		M8 Connector (4 pins)	E3Z-T86A	E3Z-T66A
	15m (Infrared LED)	2m Cable	E3Z-T81	E3Z-T61
		M8 Connector (4 pins)	E3Z-T86	E3Z-T66
	30m (Infrared LED)	2m Cable	E3Z-T82 2M	E3Z-T62 2M
		M8 Connector (4 pins)	E3Z-T87	E3Z-T67
Retro-reflective with MSR function	0.1 to 4m (Red LED)	2m Cable	E3Z-R81	E3Z-R61
		M8 Connector (4 pins)	E3Z-R86	E3Z-R66
Diffuse-reflective	1m (Infrared LED)	2m Cable	E3Z-D82	E3Z-D62
		M8 Connector (4 pins)	E3Z-D87	E3Z-D67
Background suppression	20 to 200mm (Red LED)	2m Cable	E3Z-LS81	E3Z-LS61
		M8 Connector (4 pins)	E3Z-LS86	E3Z-LS66

Note:
For sensors with IO-Link, refer to the catalog on the website automation.omron.com

Note: Tables include representative part numbers. Please consult the product page for more details.

E3FA - M18 Barrel Photoelectric Sensor

- Simplicity in selection and installation
- Compact size with flush mounting option
- IP67, IP69K for wash down resistance
- Straight or right angle (E3RA) models in cylindrical M18 plastic housing
- Background suppression, Limited Distance and Transparent detection models available

🌐 Product Page

Sensor Type	Sensor Distance	Connection	PNP Model	NPN Model
Through-beam (emitter + receiver)*	20m (Red LED)	2m Cable	E3FA-TP11 2M	E3FA-TN11 2M
		M12 Connector (4 pins)	E3FA-TP21	E3FA-TN21
Retro-reflective with MSR function	0.1 to 4m (Red LED)	2m Cable	E3FA-RP11 2M	E3FA-RN11 2M
		M12 Connector (4 pins)	E3FA-RP21	E3FA-RN21
Diffuse-reflective*	100mm (Red LED)	2m Cable	E3FA-DP11 2M	E3FA-DN11 2M
		M12 Connector (4 pins)	E3FA-DP21	E3FA-DN21
	300mm (Red LED)	2m Cable	E3FA-DP12 2M	E3FA-DN12 2M
		M12 Connector (4 pins)	E3FA-DP22	E3FA-DN22
	1m (Red LED)	2m Cable	E3FA-DP13 2M	E3FA-DN13 2M
		M12 Connector (4 pins)	E3FA-DP23	E3FA-DN23
Background suppression	100mm (Red LED)	2m Cable	E3FA-LP11 2M	E3FA-LN11 2M
		M12 Connector (4 pins)	E3FA-LP21	E3FA-LN21
	200mm (Red LED)	2m Cable	E3FA-LP12 2M	E3FA-LN12 2M
		M12 Connector (4 pins)	E3FA-LP22	E3FA-LN22

*Note for these sensing modes Infrared LED models are available.

Note: Tables include representative part numbers. Please consult the product page for more details.

E3Z-F –
M18 Barrel Mount Photoelectric Sensor

- Visible alignment spot simplifies set-up
- Popular M18 nose mounting
- Models with infrared LEDs available
- Offers various types of sensing distances

🌐 Product Page

Sensor Type	Sensor Distance	Connection	PNP Model	NPN Model
Through-beam (emitter+receiver)*	20 m	2m Cable	E3Z-FTP11 2M	E3Z-FTN11 2M
		M12 Connector (4 pins)	E3Z-FTP21	E3Z-FTN21
Retro-reflective with MSR Function	0.1 to 4m	2m Cable	E3Z-FRP11 2M	E3Z-FRN11 2M
		M12 Connector (4 pins)	E3Z-FRP21	E3Z-FRN21
Diffuse-reflective*	100 mm	2m Cable	E3Z-FDP11 2M	E3Z-FDN11 2M
		M12 Connector (4 pins)	E3Z-FDP21	E3Z-FDN21
	300 mm	2m Cable	E3Z-FDP12 2M	E3Z-FDN12 2M
		M12 Connector (4 pins)	E3Z-FDP22	E3Z-FDN22
	500 mm	2m Cable	E3Z-FDP13 2M	E3Z-FDN13 2M
		M12 Connector (4 pins)	E3Z-FDP23	E3Z-FDN23
	1 m	2m Cable	E3Z-FDP14 2M	E3Z-FDN14 2M
		M12 Connector (4 pins)	E3Z-FDP24	E3Z-FDN24

Note:
Reflectors for retroreflective models are sold separately under code E39-R1S
*Note for these sensing modes Infrared LED models are available

Note: Tables include representative part numbers. Please consult the product page for more details.

E3AS-HL - Photoelectric Sensor

- Limited effect of color or reflectivity
- Small and complex object detection
- Line and spot beam for 150mm and 500mm sensing distances
- IP69K and IP67G
- Ecolab tested and certified detergent resistance
- Advanced ease-of-use, single teach button, OLED screen
- IO-Link distance output monitoring and configuration

🌐 Product Page   📹 Product Video

Sensor Type	Sensor Distance	Beam Type	Connection	PNP Model (I/O Link)	NPN Model
CMOS laser	500 mm	Spot	Pre-wire M12 Connector	E3AS-HL500MT-M1TJ 0.3M	E3AS-HL500MN-M1TJ 0.3M
		Line		E3AS-HL500LMT-M1TJ 0.3M	E3AS-HL500LMN-M1TJ 0.3M
	150 mm	Spot		E3AS-HL150MT-M1TJ 0.3M	E3AS-HL150MN-M1TJ 0.3M
		Line		E3AS-HL150LMT-M1TJ 0.3M	E3AS-HL150LMN-M1TJ 0.3M
	500 mm	Spot	M8 4pin	E3AS-HL500MT M3	E3AS-HL500MN M3
		Line		E3AS-HL500LMT M3	E3AS-HL500LMN M3
	150 mm	Spot		E3AS-HL150MT M3	E3AS-HL150MN M3
		Line		E3AS-HL150LMT M3	E3AS-HL150LMN M3

E3AS-F - Photoelectric Sensor

- Minimal color influence on sensing distance
- 50mm to 1500mm sensing range
- IP69K and IP67G
- Ecolab tested and certified detergent resistance
- Single teach button
- IO-Link distance output monitoring and configuration

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Sensor Type	Sensor Distance	Material	Connection	PNP Model (I/O Link)	NPN Model
Time of Flight with Background Suppression	50 - 1500 mm	Stainless Steel	Pre-wired M12 Connector	E3AS-F1500IMT-M1TJ 0.3M	E3AS-F1500IMN-M1TJ 0.3M
			M8 4pin Connector	E3AS-F1500IMT M3	E3AS-F1500IMN M3
		Plastic	Pre-wired M12 Connector	E3AS-F1500IPT- M1TJ 0.3M	E3AS-F1500IPN-M1TJ 0.3M
			M8 4pin Connector	E3AS-F1500IPT M3	E3AS-F1500IPN M3
	50 - 1000 mm	Stainless Steel	Pre-wired M12 Connector	E3AS-F1000IMT-M1TJ 0.3M	E3AS-F1000IMN-M1TJ 0.3M
			M8 4pin Connector	E3AS-F1000IMT M3	E3AS-F1000IMN M3
		Plastic	Pre-wired M12 Connector	E3AS-F1000IPT-M1TJ 0.3M	E3AS-F1000IPN-M1TJ 0.3M
			M8 4pin Connector	E3AS-F1000IPT M3	E3AS-F1000IPN M3

Note: Tables include representative part numbers. Please consult the product page for more details.

E3AS-L - Photoelectric Sensor

- Enhanced background suppression-Reduced black/white error and differential travel
- 200mm or 80mm sensing range
- IP69K and IP67G
- Ecolab tested and certified detergent resistance
- Single teach button
- IO-Link configurability

🌐 Product Page

Sensor Type	Sensor Distance	Material	Connection	PNP Model (I/O Link)	NPN Model
Diffuse with Background Suppression	10 - 200 mm	Stainless Steel	Pre-wired M12 Connector	E3AS-L200MT-M1TJ 0.3M	E3AS-L200MN-M1TJ 0.3M
	10 - 80 mm			E3AS-L80MT-M1TJ 0.3M	E3AS-L80MN-M1TJ 0.3M
	10 - 200 mm		M8 4pin Connector	E3AS-L200MT M3	E3AS-L200MN M3
	10 - 80 mm			E3AS-L80MT M3	E3AS-L80MN M3

E3S-DC - Color Mark Detection Sensor

- High signal to noise ratio detects subtle color differences.
- High luminance, three-element (RGB) LED light source for greater light intensity.
- Highly efficient optics technology provides high power and enables stable detection even of subtle color differences.

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Type	Sensor Distance	Connection	Output	Baud Rate (IO-Link)	Model
Diffuse - reflective (mark detection)	10 ± 3mm	M12 Connector	PNP	COM 3 (230, 4 kbps)	E3S-DCP21-IL3
			NPN	---	E3S-DCN21

Note: Tables include representative part numbers. Please consult the product page for more details.

E3NX-FA - High Speed Digital Fiber Amplifier

- Easy teaching by Smart tuning within a few seconds
- New N-Smart technology provides significant improvement for sensing distance, minimum object detection and speed
- Easy and transparent information about sensor status by Solution Viewer and Change Finder function
- EtherCAT Communication unit for high-speed field bus connectivity

🌐 Product Page

Setting/Function	Sensor Distance	Inputs/Outputs	Connection	PNP Model	NPN Model
Standard Models	Sensing distance up to 4m depending on fiber used	1 output	2 m	E3NX-FA41 2M	E3NX-FA11 2M
Advanced Models		2 outputs + 1 input	2 m	E3NX-FA51 2M	E3NX-FA21 2M
Analog Output Models		2 outputs	2 m	E3NX-FA41AN 2M	E3NX-FA11AN 2M

Note: Infrared standard models are available as well as connector options for standard, advanced, and infrared models.

E3X-HD - Advanced Fiber Amplifier

- Simple one-button smart tuning for sensor threshold and light intensity
- Confirm settings and status easily with dual digital display
- Automatic compensation for large objects and low reflectance dark targets

🌐 Product Page

Setting / Function	Range	Connection	PNP Model	NPN Model
Advanced digital amplifier	Up to 4m depending on fiber model	2m Cable	E3X-HD41 2M	E3X-HD11 2M
		M8 Connector	E3X-HD44	E3X-HD14

Note: Tables include representative part numbers. Please consult the product page for more details.

E3X-NA / SD -
Fiber Optic Amplifiers

- Easy adjustment with potentiometer
- Mutual interference prevention
- Enhanced water resistance types

🌐 Product Page

Setting / Function	Distance	Connection	PNP Model	NPN Model
Potentiometer and Bargraph	Depending on the fiber optic model	2m Cable	E3X-NA41	E3X-NA11
Teach Button and digital display			E3X-SD51	E3X-SD21

E3NX-CA -
Colormark Fiber Amplifier

- High signal to noise ratio makes subtle color difference detection easy
- Able to handle glossy materials
- Stable even when lots change

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Model	Sensor Distance	Connection	Inputs / Outputs	PNP Model	NPN Model
Standard Model	Sensor distance depends on selected fiber model	2m Cable	1 output	E3NX-CA41 2M	E3NX-CA11 2M
Advanced Model			2 outputs / 1 input	E3NX-CA51 2M	E3NX-CA21 2M

*For fiber options, or models for special applications, refer to the E32 fibers catalog on the Omron website.

Note: Tables include representative part numbers. Please consult the product page for more details.

E3ZM-V –
Colormark Detection Sensor

- Compact SUS 316L colormark photoelelctric sensor
- Ideal for high contrast colormark detection in a small package
- IP69K and IP67 rated for environmental robustness
- 50 us response time
- Single teach button

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Type	Sensor Distance	Connection	PNP	NPN
Diffuse - reflective (color mark detection)	12 ± 2mm	Pre-wired	E3ZM-V81 2M	E3ZM-V61 2M
		M8 Connector	E3ZM-V86	E3ZM-V66

Notes: Additional model numbers with different cable lengths, connections and options are available.
Tables include representative part numbers. Please consult the product page for more details.

ZW Confocal Displacement - Measurement Sensors

- Static Resolution of 0.25 µm
- EtherCAT, EtherNet/IP, EtherNet TCP/UDP, and Serial RS-232C Network communications included
- Analog and Discrete I/O for measurement and functions
- Stable measurements for any material including glass and mirror-like surfaces
- Simple programming with Sysmac Studio software
- Compact sensor heads with no electronic parts - electrical noise immune and does not generate heat

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Measuring Range	Spot Diameter	Cable Length	Controller	Sensor Head
10 ± 0.5 mm	4 µm	2 m	ZW-8000T	ZW-S8010 2M
20 ± 1 mm	7 µm	2 m		ZW-S8020 2M
30 ± 2 mm	10 µm	2 m		ZW-S8030 2M
10 ± 0.5 mm	50 µm	2 m	ZW-7000T	ZW-S7010 2M
20 ± 1 mm	70 µm	2 m		ZW-S7020 2M
30 ± 2 mm	100 µm	2 m		ZW-S7030 2M
40 ± 3 mm	120 µm	2 m		ZW-S7040 2M
10 ± 0.5 mm	9 µm	2 m		ZW-S5010 2M
20 ± 1 mm	13 µm	2 m	ZW-5000T	ZW-S5020 2M
30 ± 2 mm	18 µm	2 m		ZW-S5030 2M

Accessories		
Type	Cable Length	Sensor Head
Serial RS-232C Cable for personal computer	2m	ZW-XRS2

Notes: Pen-shaped straight and right-angle sensor heads are also available. Shorter 0.3 meter sensor cables are available along with Extension Fiber Cables (2, 5, 10, 20, and 30 meters long).

Note: Tables include representative part numbers. Please consult the product page for more details.

ZX1 and ZX2 CMOS Laser Measurement Sensors

• Down to 1.5um resolution
• Best in class performance for accuracy and speed
• Increased measurement range
• Stable measurement for objects with any surface
• Simple configuration by one-button, Smart Tuning
• Compact size for quick mounting

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ZX1 Sensor Heads with built-in Amplifier				
Range	**Resolution**	**Connection**	**PNP Model**	**NPN Model**
50 ± 10 mm	2um	2 m Cable	ZX1-LD50A81 2M	ZX1-LD50A61 2M
100 ± 35 mm	7um		ZX1-LD100A81 2M	ZX1-LD100A61 2M
300 ± 150 mm	30um		ZX1-LD300A81 2M	ZX1-LD300A61 2M
600 ± 400 mm	80um		ZX1-LD600A81 2M	ZX1-LD600A61 2M
ZX2 Sensor Heads				
Range	**Resolution**	**Connection**	**Line-Beam Model**	**Spot-Beam Model**
50 ± 10 mm	1.5um	Amplifier Unit	ZX2-LD50L	ZX2-LD50
100 ± 35 mm	5um	Amplifier Unit	ZX2-LD100L	ZX2-LD100
ZX2 Amplifier Units				
Range	**Resolution**	**Connection**	**PNP Model**	**NPN Model**
N/A	N/A	2 m Cable	ZX2-LDA41 2M	ZX2-LDA11 2M

Note: Tables include representative part numbers. Please consult the product page for more details.

Sensor Cordsets

- Standard PVC or PUR cordsets for a wide variety of applications
- M8 and M12 connector sizes with 3 and 4 pin configurations
- Straight, right angle, and double ended variations available
- 2m, 5m, and 10m cordset lengths are available. Alternative lengths are also available

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Material	Connector Size	No. of Pins	Length	Straight Connector	Right Angle Connector
PUR	M8	3 Pins	2 m	XS3F-M8PUR3S2M	XS3F-M8PUR3A2M
			5 m	XS3F-M8PUR3S5M	XS3F-M8PUR3A5M
			10 m	XS3F-M8PUR3S10M	XS3F-M8PUR3A10M
		4 Pins	2 m	XS3F-M8PUR4S2M	XS3F-M8PUR4A2M
			5 m	XS3F-M8PUR4S5M	XS3F-M8PUR4A5M
			10 m	XS3F-M8PUR4S10M	XS3F-M8PUR4A10M
	M12		2 m	XS2F-M12PUR4S2M	XS2F-M12PUR4A2M
			5 m	XS2F-M12PUR4S5M	XS2F-M12PUR4A5M
			10 m	XS2F-M12PUR4S10M	XS2F-M12PUR4A10M
PVC	M8	3 Pins	2 m	XS3F-M8PVC3S2M	XS3F-M8PVC3A2M
			5 m	XS3F-M8PVC3S5M	XS3F-M8PVC3A5M
			10 m	XS3F-M8PVC3S10M	XS3F-M8PVC3A10M
		4 Pins	2 m	XS3F-M8PVC4S2M	XS3F-M8PVC4A2M
			5 m	XS3F-M8PVC4S5M	XS3F-M8PVC4A5M
			10 m	XS3F-M8PVC4S10M	XS3F-M8PVC4A10M
	M12	3 Pins	2 m	XS2F-M12PVC3S2M	XS2F-M12PVC3A2M
			5 m	XS2F-M12PVC3S5M	XS2F-M12PVC3A5M
			10 m	XS2F-M12PVC3S10M	XS2F-M12PVC3A10M
		4 Pins	2 m	XS2F-M12PVC4S2M	XS2F-M12PVC4A2M
			5 m	XS2F-M12PVC4S5M	XS2F-M12PVC4A5M
			10 m	XS2F-M12PVC4S10M	XS2F-M12PVC4A10M

Double-ended cordsets

Material	Connector Size	No. of Pins	Length	Straight Connector	Right Angle (Socket)/Straight (Plug)
PVC	M12	4	2 m	XS2W-D421-D81-F	XS2W-D424-D81-F
			5 m	XS2W-D421-G81-F	XS2W-D424-G81-F
			10 m	XS2W-D421-J81-F	XS2W-D424-J81-F

Note: Tables include representative part numbers. Please consult the product page for more details.

S8VK - Complete Line Of Power Supplies

- Compact single-phase and three-phase power supplies
- Operating Temperature: -40°C to 70°C (S8VK-G and S8VK-T) and -25°C to 60°C (S8VK-C)
- 5 year warranty
- Power Boost Function: 120% for 10s (S8VK-G/T)

🌐 Product Page

Line	Power	Output Voltage	Output Current	Capacity	Model
Economy Single-Phase	100 to 240 VAC 90 to 350 VDC	24V	2.5 A	60 W	S8VK-C06024
			5 A	120 W	S8VK-C12024
			10 A	240 W	S8VK-C24024
			20 A	480 W	S8VK-C48024
General Purpose Single-phase		5V	3 A	15 W	S8VK-G01505
		12V	2.5 A	30 W	S8VK-G03012
		24V	1.3 A	30 W	S8VK-G03024
			2.5 A	60 W	S8VK-G06024
			5 A	120 W	S8VK-G12024
			10 A	240 W	S8VK-G24024
			20 A	480 W	S8VK-G48024
		48V	10 A	480 W	S8VK-G48048
Three-phase	380 to 480 VAC 450 to 600 VDC	24V	5 A	120 W	S8VK-T12024
			10 A	240 W	S8VK-T24024
			20 A	480 W	S8VK-T48024
			40 A	960 W	S8VK-T96024
Environmentally Resistant 3-Phase Power Supply with Reduced Footprint and Predicitve Maintnenace Features	380V to 480 VAC 450 to 600 VDC"	24VDC	10A	240W	S8VK-WB24024
		48VDC	5A		S8VK-WB24048
		24VDC	20A	480W	S8VK-WB48024
		48VDC	10A		S8VK-WB48048
		24VDC	60A	960W	S8VK-WB96024
		48VDC	30A		S8VK-WB96048

Note: Tables include representative part numbers.
      Please refer to the Component selection guide for more details.

S8VK-X - Power Supply With EtherNet / IP

- Product replacement time, output voltage, output current, and more can be monitored remotely on the Ethernet/IP network
- Product status can be checked on-site using the indication monitor
- Remote monitoring with included software tool

🌐 Product Page   📹 Product Video

Line	Power	Output Voltage	Output Current	Capacity	Model
EtherNet/IP Communication With Display	100 to 240 VAC 90 to 350 VDC	24V	3.75 A	90 W	S8VK-X09024A-EIP
			5 A	120 W	S8VK-X12024A-EIP
			10 A	240 W	S8VK-X24024A-EIP
EtherNet/IP Communication Without Display			2.5 A	60 W	S8VK-X06024-EIP
			3.75 A	90 W	S8VK-X09024-EIP
			5 A	120 W	S8VK-X12024-EIP
			10 A	240 W	S8VK-X24024-EIP
			20 A	480 W	S8VK-X48024-EIP

S8V-CP - Electronic Circuit Protector

- Compact design saves panel space compared to standard circuit breakers
- 3-step LED indicators for easy identification of channel status
- 4 and 8 channel models available with individual output current adjustments for various loads
- Available UL Class-2 output model

🌐 Product Page

Power	Output Voltage	Number of Outputs	Maximum Input Current	Adjustment Output Current	Model
24 VDC	24 VDC	4	40A	2 A up to 10 A	S8V-CP0424
		8	70A	2 A up to 10 A	S8V-CP0824

Note: Tables include representative part numbers.
        Please refer to the Component selection guide for more details.

H5CX-N - Digital Timer

- 15 Different timing settings
- High Precision and Excellent Performance
- Available IP66 rating with optional waterproof cover
- Time parameterization from 0.001s to 9999h

🌐 Product Page   🌐 Product Video

Power	Terminal Type	Output Type	Model
12 - 24V AC/DC	Screw	Relay	H5CX-AD-N AC24/DC12-24
		Transistor	H5CX-ASD-N DC12-24/AC24
100 - 240 VAC		Relay	H5CX-A-N AC100-240

H7CC - Digital Counter & Tachometer

- The H7CC is a new and improved version of our digital counter with an available tachometer function
- Improved LED Display makes the screen easier to read
- LED indicators built into the push buttons for visual feedback
- Preventative maintenance features alert you when the product is nearing the end of it's life
- Simple and easy to use programming interface saves time

🌐 Product Page

Type	Classification	External Connections	Outputs	Power Supply Voltage	Model
H7CC-A	Preset Counter	11 Pin	Contact output (SPDT)	100 to 240 VAC	H7CC-A11
		Screw Terminals	Contact output (SPDT)	100 to 240 VAC	H7CC-A
			Contact output (SPDT)	24 VAC / 12 to 48 VDC	H7CC-AD
	Preset Counter / Tachometer		Contact output (SPST+SPDT)	100 to 240 VAC	H7CC-AW
			Contact output (SPST+SPDT)	24 VAC / 12 to 48 VDC	H7CC-AWD
H7CC-R	Tachometer	11 Pin	Contact output (SPDT)	100 to 240 VAC	H7CC-R11

Note: Tables include representative part numbers.
    Please refer to the Component selection guide for more details.

G2RV-ST - Slim I/O Relay

- Push-in plus Technology for easy wiring
- Lockable test switch models available for circuit troubleshooting
- LED/mechanical flag available for checking operation
- Slim 6mm width – space saving
- Gold plate contact models available for micro loads

🌐 Product Page

Coil Voltage	Contact Rating	Contact Form	Screw Terminal Model	Push-in Terminal Model	Individual Relay for Replacement
24 VDC			G2RV-ST700 DC24	G2RV-ST500 DC24	G2RV-1-S-G DC21
110 VAC	6 A	SPDT	G2RV-ST700 AC110	G2RV-ST500 AC110	G2RV-1-S-G DC48
230VAC			G2RV-ST700 AC230	G2RV-ST500 AC230	

Accessories

Description	Number of Poles	Red	Blue	Yellow
Jumper bar	20	PYDN-6.2T-200R	PYDN-6.2T-200S	PYDN-6.2T-200Y

G3NA - Hockey Puck Style Solid State Relay

- Compact Dimensions
- Built-in varistor
- LED operation indictator
- 5-90A output current

🌐 Product Page

Isolation	Zero Cross Function	Indicator	Application Output Load	Rated Voltage Input	Model
Phototriac	Yes	Yes	10A at 24 to 240 VAC	5 to 24 VDC	G3NA-210B-UTU DC5-24
Phototriac	Yes	Yes	20 A at 24 to 240 VAC	5 to 24 VDC	G3NA-220B-UTU DC5-24
Phototriac	Yes	Yes	25 A at 24 to 240 VAC	5 to 24 VDC	G3NA-225B-UTU DC5-24

Note: Tables include representative part numbers.
    Please refer to the Component selection guide for more details.

G2R-S - Slim Mechanical Relay

- Lockable test switch models available for circuit troubleshooting
- LED/mechanical flag available for checking operation
- Available DIN-rail mount relay sockets
- Slim 16mm design with socket

🌐 Product Page

Coil Voltage	Contact Rating	Contact Form	Relay Socket Model	Relay Model
12 VDC	10 A	SPDT	P2RFZ-05E/P2RF-05-PU	G2R-1-S DC12(S)
24 VDC				G2R-1-S DC24(S)
120 VAC				G2R-1-SN AC120(S)
240 VAC				G2R-1-SN AC240(S)
12 VDC	5 A	DPDT	P2RFZ-08E/P2RF-08-PU	G2R-2-S DC12(S)
24 VDC				G2R-2-S DC24(S)
120 VAC				G2R-2-S AC120(S)
240 VAC				G2R-2-S AC240(S)

MY - General Purpose Ice Cube Relay

- DPDT type 10 A / 4PDT type 5 A
- Lockable test switch models available for circuit troubleshooting
- LED/mechanical flag available for checking operation
- Low power switching (1 mA at 5 VDC) / Bifurcated 4PDT (0.1 mA at 1 VDC)

🌐 Product Page

Coil Voltage	Contact Rating	Contact Form	Relay Socket Model	Relay Model
24 VDC	10 A	DPDT	PYFZ-08-E/PYF-08-PU	MY2N DC24 (S)
120 VAC				MY2N AC110/120 (S)
220 VAC				MY2N AC220/240 (S)
24 VDC	5 A	4PDT	PYFZ-14-E/PYF-14-PU	MY4N DC24 (S)
120 VAC				MY4N AC110/120 (S)
220 VAC				MY4N AC220/240 (S)

Note: Tables include representative part numbers.
Please refer to the Component selection guide for more details.

E5CC/E5DC - General-Purpose Temperature Controllers

- High contrast white PV display
- High-speed sampling at 50ms
- Available auxiliary outputs, event inputs, a transfer output, and a remote SP input
- Short body with a depth of 60mm
- Available IP66 rating with optional waterproof cover
- Additional DIN sizes available 1/4, 1/8, 1/16, 1/32

Product Page

Dimensions	Type of Input	Power	Type of Output	Auxiliary Output	Standard Model
48 x 48 x 60 mm	Thermocouple, PT100, Analogical	100 -240 VAC	Relay	SPST-NO contacts (Relay Output)	E5CC-RX3A5M-000
			Voltage		E5CC-QX3A5M-000
			Current		E5CC-CX3A5M-000
		24 VAC / VDC	Relay		E5CC-RX3D5M-000
			Voltage		E5CC-QX3D5M-000
			Current		E5CC-CX3D5M-000
22.5mm For DIN rail mount		100-240 VAC	Relay		E5DC-RX2ASM-000
			Current		E5DC-CX2ASM-000
		24VAC / VDC	Relay		E5DC-RX2DSM-000
			Voltage		E5DC-QX2DSM-002

Limit & Basic Switches

- Limit switches and basic switches are electromechanical switches used to detect and limit motion within industrial environments
- Available in a wide variety of actuator arms, lever arms and plungers
- Multiple switch designs for use in a variety of applications and environments
- Additional limit and basic switch configurations available on Omron website

Product Page

Type	Series	Features	Applications	Models
General Limit Switches	D4A	Wide temperature range from -40°C to +100°C (standard type) for use in heavy duty applications	Machine tool, material handling, palletizer, injection molding, packaging equipment, automotive hoist/lift machinery	D4A-1101-N
				D4A-2918-N
	WL-N	Two-circuit switch for reliable switching		WLG2-LD
				WLG2-LD-M1J
	D4C	Slim body and designed for easy side-by-side mounting (Plunger type: 6 switches maximum)	Machine tool, material handling, palletizer, packaging equipment, mobile lift equipment, robotics	D4C-1602
				D4C-1601
	ZE	Long service life and high breaking capacity	Conveyor controls, packaging equipment, material handling, printing machinery, waste & recycling compacting machinery	ZE-NJ-2S
				ZE-N-2S
Basic Switches	Z	A large switching capacity of 15A and high repeat accuracy	Elevators, mobile lift equipment, forklift, injection molding, utility switchgear, controls for doors/gates/valves, foot switches	Z-15GQ-B
				Z-15GD-B
	X	Direct current switch that incorporates a permanent magnet in the contact mechanism to deflect arcs and increases switch life	Mobile lift equipment, forklift, injection molding, utility switchgear, controls for doors/gates/valves, foot switches	X-10GW22-B
				X-10GW-B
	DZ	Double pole double throw basic switch for two independent circuit control. Ideal for switching the circuits operating on two different voltages, and controlling two circuits.		DZ-10GW22-1B
				DZ-10GW-1B
	TZ	High temperature switch that maintains stable operation at an ambient temperature of 400°C	Industrial boilers, power plant, incinerators, industrial heaters	TZ-1GV
				TZ-1GV22

Note: Tables include representative part numbers.
    Please refer to the Component selection guide for more details.

K6CM - Motor Condition Monitor

- 24/7 remote monitoring of critical 3-phase induction motors
- Can monitor motor vibration, temperature, current, and insulation resistance depending on model
- EtherNet/IP and Modbus TCP communication
- Included monitoring software tool can monitor up to 10 motors at one time

🌐 Product Page

Motor failure mode	Description	Power	Controller model	Sensor Model
Bearing Wear	Monitors motor vibration/ temperature with sensor	24 VAC/DC	K6CM-VBMD-EIP	K6CM-VBS1
Overload Condition	Monitors motor current and degradation level using a CT sensor	24 VAC/DC	K6CM-CI2MD-EIP	K6CM-CICB025 K6CM-CICB100 K6CM-CICB200 K6CM-CICB400
Insulation breakdown	Monitors motor insulation and current leakage with sensor	24 VAC/DC	K6CM-ISMD-EIP	K6CM-ISZBI52

K6PM - Thermal Condition Monitor

- 24/7 remote thermal monitoring of equipment using infrared thermal image sensors
- Thermal Imaging Sensor that detects temperatures 32-392°F (0-200°C)
- EtherNet/IP and Modbus TCP communication
- Included monitoring software tool can monitor up to 155 sensors at one time

🌐 Product Page

Power	Controller	Thermal image Sensor
24 VAC/DC	K6PM-THMD-EIP	K6PM-THS3232

Note: Tables include representative part numbers.
      Please refer to the Component selection guide for more details.

K7TM –
Heater Condition Monitor

- Three-phase and single-phase relays for voltage and current monitoring
- Complete line for monitoring sequence and phase drop, asymmetry, under or over control
- Supply voltages: 24 VAC/DC, 100 to 240 VAC, 380-480 VAC
- Special models for monitoring temperature and liquid level

Product Page

Unit	Supply Voltage	Model
Controller Unit	100-240 VAC	K7TM-A2MA
	24 VAC/VDC	K7TM-A2MD
CT Clamp		
Rated Primary Side Current	Model	UL Compliant Models
5 A	K6CM-CICB005	K6CM-CICB005-C
25 A	K6CM-CICB025	K6CM-CICB025-C
100 A	K6CM-CICB100	K6CM-CICB100-C
200 A	K6CM-CICB200	K6CM-CICB200-C
400 A	K6CM-CICB400	K6CM-CICB400-C
600 A	K6CM-CICB600	-

K8AK / K8DS –
Monitoring Relays

- Three-phase and single-phase relays for voltage and current monitoring
- Complete line for monitoring sequence and phase drop, asymmetry, under or over control
- Supply voltages: 24 VAC/DC, 100 to 240 VAC, 380-480 VAC
- Special models for monitoring temperature and liquid level

Product Page

Phase	Dimensions	Monitoring Type	Input	Output Contact Form	Model
Single-Phase	K8AK - 22.5 x 90 x 100 [mm] K8DS: 17.5 x 80 x 69 [mm]	Over Current	24 VAC/DC or 100 to 240 VAC	SPDT	K8AK-AS2 24VAC/DC
		Overvoltage and Undervoltage	24 VAC/DC or 100 to 240 VAC	SPDT	K8AK-VW2 24VAC/DC
Three-Phase		Phase Drop and Phase Sequence	200-480 VAC	DPDT SPDT	K8AK-PH1 200/500VAC
					K8DS-PH1 200/480VAC
		Phase Drop, Phase Sequence, Overvoltage and Undervoltage	200-240 VAC	(2) SPDT	K8AK-PM1 200/240VAC
			380-480 VAC		K8AK-PM2 380/480VAC

Note: Tables include representative part numbers.

Please refer to the Component selection guide for more details.

K7GE – Insulation Resistance Monitoring

- Reliable, Safe and Accurate Automatic Insulation Resistance Measurements
- Modular Product units for multiple motor insulation resistance monitoring
- 50 VDC measurement voltage
- Monitor up to 8 motors with additional probes
- Transistor Alarm Outputs, RS-485 communication
- Especially useful for servo/motors operating in harsh environments

🌐 **Product Page**

Unit	Supply Voltage	Model
Controller Unit	100-240 VAC	K7GE-MGMA
	24 VAC/VDC	K7GE-MGMD
Probe Unit	—	K7GE-MG1

A2W - Wireless Pushbutton

- 8 pushbuttons can be assigned to one receiver unit
- Each receiver has 8 transistor outputs (one-shot operation)
- LED signal strength indicator on each button
- Battery-less pushbutton (uses self-generating power)

🌐 **Product Page**

Type	Button type	Frequency (MHz)	Area	Button color	Flange color	Model
Pushbutton	Mushroom	922.5	United States or Canada	Green	Black	A2W-TC-WC1 US1GB
	Full guard			Red	Black	A2W-TC-WC1 US2RB
				Green	Black	A2W-TC-WC1 US2GB
				Yellow	Black	A2W-TC-WC1 US2YB
				Blue	Black	A2W-TC-WC1 US2AB
				Black	Black	A2W-TC-WC1 US2BB

Type	Frequency (MHz)	Area	Output configuration	Model
Receiver	922.5	United States or Canada	PNP	A2W-RCP-WC1 US

Note: This product is a wireless device that conforms to the radio regulations of United States or Canada. It cannot be used outside of United States or Canada.

Accessories (sold separately)	Model	Remarks
High-sensitivity magnetic-base antenna	A2W-AT2.5-WC1	Frequencies: all frequencies supported, cable length 2.5 m Degree of protection: IP65

Note: Tables include representative part numbers.

    Please refer to the Component selection guide for more details.

A22N / M22N –
Push Buttons And Indicators

- Complete line with Ø 22mm assemblies
- Various colors and models with plastic or metallic bezels
- Color coded contact blocks to prevent assembly errors
- Easy installation and IP66 degree of protection

🌐 Product Page

Type	Bezel material	Color	Contact	LED Voltage	Model
A22NN - Push Button	(1) Bezel Material B – Plastic R – Metallic	(2) Color B – Red G – Green Y – Yellow W – White A – Blue B – Black	1 NO	(3) LED Voltage N – No lighting A – 6 VAC/VDC B – 12 VAC/VDC C – 24VAC/VDC D – 100/120 VAC/VDC E – 200/240 VAC/VDC	A22NN-RNM-NGA-G100-NN
			1 NO		A22NN-RNM-NBA-G100-NN
A22NL - Lighted Push Button			1 NO		A22NL-BGM-TGA-G100-GC
			1 NO		A22NL-RPM-TRA-G100-RC
			---		M22N-BC-TYA-YC
M22N - Indicators			---		M22N-BN-TGA-GC
A22NS - Selector			2 positions - 1NO		A22NS-2RM-NBA-G100-NN
			3 positions - 2NO		A22NS-3RM-NBA-G101-NN
A22NK - Selector with Key		----	2 positions - 1NO	----	A22NK-2RM-01AA-G100
			2 positions - 1NO		A22NK-2RL-01BA-G100

Item	Model
Contact block 1NO	A22NZ-S-G1A
Contact block 1NC	A22NZ-S-G1B

Note: Tables include representative part numbers.
      Please refer to the Component selection guide for more details.

CP1H – MicroPLC for 4 Axis Position Control and High Speed Control

- High-speed counters with differential phases and pulse outputs for 4 axes control. Easily handles multi-axis control with a single unit.
- Up to two Ethernet ports and two serial ports when selecting the appropriate optional communications boards
- Up to 40 Built in I/O points with Analog I/O built in on XA CPU units
- Over 30 different expansion units for I/O, temperature sensing and communications

🌐 Product Page

Type	Input Points	Output Points	Expandable up to*	Program Capacity	Data Memory Capacity	Power Supply	Output Method	Built-In Functions			Model
								E	I/C	P	
CP1H-X with pulse outputs for 4 axes	24	16	320 points	20K steps	32K words	85 to 264 VAC	Relay output	4	8	--	CP1H-X40DR-A
						20.4 to 26.4 VDC	Transistor output (sink type)	4	8	4	CP1H-X40DT-D
							Transistor output (source type)	4	8	4	CP1H-X40DT1-D
CP1H-XA with built-in analog I/O (4 analog inputs/2 analog outputs; 1/12,000 resolution)						85 to 264 VAC	Relay output	4	8	--	CP1H-XA40DR-A
						20.4 to 26.4 VDC	Transistor output (sink type)	4	8	4	CP1H-XA40DT-D
							Transistor output (source type)	4	8	4	CP1H-XA40DT1-D
CP1H-Y with 1-MHz pulse I/O	12	8	300 points				Transistor output (sink type)	4**	6	4**	CP1H-Y20DT-D

Note: Built-in functions: E = Encoder inputs; I/C = Interrupts/counters; P = Pulse outputs

*CP1H CPU series can be expanded with CP-series Expansion Units and CJ1 Special I/O Units.
** Encoder inputs: 2x 1 MHz + 2x 100 kHz; Pulse outputs: 2x 1 MHz + 2x 100 kHz.

Note: Tables include representative part numbers. Please consult the product page for more details.

CP2E - Micro PLC for Data Collection and Machine-To-Machine Communication

- Up to five communications channels: dual Ethernet and up to three serial ports for data collection, machine-to-machine or IIoT
- Built-in I/O of either 14, 20, 30, 40 or 60 points with up to 180 I/O points when using expansion modules
- Up to four axes of motion control for precise machine movement

Product Page

CP2E-N/Network Models

I/O points	Specifications								
	Power Supply	Inputs	Outputs	Output Type	Communications	Axis	Option Boards	Expansion Units	Model
14	100 to 240 VAC	8	6	Relay	1 Ethernet port Up to 2 serial ports	2	1		CP2E-N14DR-A
				Transistor (sinking)					CP2E-N14DT-A
	24 VDC			Relay					CP2E-N14DR-D
				Transistor (sinking)					CP2E-N14DT-D
				Transistor (sourcing)					CP2E-N14DT1-D
20	100 to 240 VAC	12	8	Relay	1 Ethernet port Up to 2 serial ports	2	1		CP2E-N20DR-A
				Transistor (sinking)					CP2E-N20DT-A
	24 VDC			Relay					CP2E-N20DR-D
				Transistor (sinking)					CP2E-N20DT-D
				Transistor (sourcing)					CP2E-N20DT1-D
30	100 to 240 VAC	18	12	Relay	2 Ethernet ports Up to 3 serial ports	4	2	3	CP2E-N30DR-A
				Transistor (sinking)					CP2E-N30DT-A
	24 VDC			Relay					CP2E-N30DR-D
				Transistor (sinking)					CP2E-N30DT-D
				Transistor (sourcing)					CP2E-N30DT1-D
40	100 to 240 VAC	24	16	Relay	2 Ethernet ports Up to 3 serial ports	4	2	3	CP2E-N40DR-A
				Transistor (sinking)					CP2E-N40DT-A
	24 VDC			Relay					CP2E-N40DR-D
				Transistor (sinking)					CP2E-N40DT-D
				Transistor (sourcing)					CP2E-N40DT1-D
60	100 to 240 VAC	36	24	Relay	2 Ethernet ports Up to 3 serial ports	4	2	3	CP2E-N60DR-A
				Transistor (sinking)					CP2E-N60DT-A
	24 VDC			Relay					CP2E-N60DR-D
				Transistor (sinking)					CP2E-N60DT-D
				Transistor (sourcing)					CP2E-N60DT1-D

Note: Tables include representative part numbers. Please consult the product page for more details.

CP2E - Micro PLC (continued)

- Function block library for expedited program development
- Analog, high speed counters, pulse outputs, linear interpolation and PWM output facilitates a wide range of applications

🌐 Product Page

CP2E-S/Standard Models

I/O points	Specifications								
	Power Supply	Inputs	Outputs	Output Type	Communications	Axis	Option Boards	Expansion Units	Model
30	100 to 240 VAC	18	12	Relay	1 x RS-232C port 1 x RS-485 port	2	----	3	CP2E-S30DR-A
30	24 VDC	18	12	Transistor (sinking)	1 x RS-232C port 1 x RS-485 port	2	----	3	CP2E-S30DT-D
30		18	12	Transistor (sourcing)		2		3	CP2E-S30DT1-D
40	100 to 240 VAC	24	16	Relay	1 x RS-232C port 1 x RS-485 port	2	----	3	CP2E-S40DR-A
40	24 VDC	24	16	Transistor (sinking)	1 x RS-232C port 1 x RS-485 port	2	----	3	CP2E-S40DT-D
40		24	16	Transistor (sourcing)		2		3	CP2E-S40DT1-D
60	100 to 240 VAC	36	24	Relay	1 x RS-232C port 1 x RS-485 port	2	----	3	CP2E-S60DR-A
60	24 VDC	36	24	Transistor (sinking)	1 x RS-232C port 1 x RS-485 port	2	----	3	CP2E-S60DT-D
60		36	24	Transistor (sourcing)		2		3	CP2E-S60DT1-D

CP2E-E/Essential Models

I/O points	Specifications								
	Power Supply	Inputs	Outputs	Output Type	Communications	Axis	Option Boards	Expansion Units	Model
14	100 to 240 VAC	8	6	Relay	1 x RS-232C port	----	----	3	CP2E-E14DR-A
20	100 to 240 VAC	12	8	Relay	1 x RS-232C port	----	----	3	CP2E-E20DR-A
30	100 to 240 VAC	18	12	Relay	1 x RS-232C port	----	----	3	CP2E-E30DR-A
40	100 to 240 VAC	24	16	Relay	1 x RS-232C port	----	----	3	CP2E-E40DR-A
60	100 to 240 VAC	36	24	Relay	1 x RS-232C port	----	----	3	CP2E-E60DR-A

Note: Tables include representative part numbers. Please consult the product page for more details.

CP1L - Micro PLC

- Compact PLC for up to 180 I/O points
- Programming via USB port or Ethernet port based on model
- Optional boards for Analog, Serial and Ethernet communication on select models
- Supports up to 4 encoders and 2 pulse train outputs (transistor models only)

Product Page

Family	Power Supply	Amount of I/Os in the CPU			Expansion Units	Communication Ports	Option Boards	Output Type	Model
		Digital		Analog					
		Inputs	Outputs	Inputs					
CP1L-EM	24 VDC	24	16	2 (0-10V)	3	Ethernet FINS	2	Transistor (sourcing)	CP1L-EM40DT1-D
	24 VDC	24	16	2 (0-10V)	3	Ethernet FINS	2	Relay	CP1L-EM40DR-D
	24 VDC	18	12	2 (0-10V)	3	Ethernet FINS	2	Transistor (sourcing)	CP1L-EM30DT1-D
	24 VDC	18	12	2 (0-10V)	3	Ethernet FINS	2	Relay	CP1L-EM30DR-D
CP1L-EL	24 VDC	12	8	2 (0-10V)	1	Ethernet FINS	1	Transistor (sourcing)	CP1L-EL20DT1-D
	24 VDC	12	8	2 (0-10V)	1	Ethernet FINS	1	Relay	CP1L-EL20DR-D
CP1L-M	100 to 240 VAC	24	16	No	3	USB	2	Relay	CP1L-M40DR-A
	24 VDC	24	16	No	3	USB	2	Relay	CP1L-M40DR-D
	24 VDC	24	16	No	3	USB	2	Transistor (sourcing)	CP1L-M40DT1-D
	100 to 240 VAC	18	12	No	3	USB	2	Relay	CP1L-M30DR-A
	24 VDC	18	12	No	3	USB	2	Relay	CP1L-M30DR-D
	24 VDC	18	12	No	3	USB	2	Transistor (sourcing)	CP1L-M30DT1-D
CP1L-L	24 VDC	12	8	No	1	USB	1	Transistor (sourcing)	CP1L-L20DT1-D
	24 VDC	12	8	No	1	USB	1	Transistor (sinking)	CP1L-L20DT-D
	100 to 240 VAC	12	8	No	1	USB	1	Relay	CP1L-L20DR-A
	24 VDC	12	8	No	1	USB	1	Relay	CP1L-L20DR-D
	24 VDC	8	6	No	1	USB	1	Transistor (sinking)	CP1L-L14DT-D
	100 to 240 VAC	8	6	No	1	USB	1	Relay	CP1L-L14DR-A

Expansion Modules and Accessories

Family	Communication Ports	Model
Digital Expansions	8 Inputs	CP1W-8ED
	8 Relay Outputs	CP1W-8ER
	16 Relay Outputs	CP1W-16ER
	12 Inputs and 8 PNP Transistor Outputs	CP1W-20EDT1
	24 Inputs and 16 Relay Outputs	CP1W-40EDR
Analog Expansions Resolution of 12000 points	4 Inputs (0 to 5V, 1 to 5V, 0 to 10V, -10 to + 10V, 0 to 20mA and 4 to 20mA)	CP1W-AD042
	4 Outputs (1 to 5V, 0 to 10V, -10 to + 10V, 0 to 20mA and 4 to 20mA)	CP1W-DA042
	2 Inputs (0 to 5V, 1 to 5V, 0 to 10V, -10 to + 10V, 0 to 20mA and 4 to 20mA) 1 Output (1 to 5V, 0 to 10V, -10 to + 10V, 0 to 20mA and 4 to 20mA)	CP1W-MAD42
Optional Communication Adapters	RS-232C Serial Port (15m Distance)	CP1W-CIF01
	RS-422A/485 Serial Port (50m Distance)	CP1W-CIF11
	RS-422A/485 Serial Port (500m Distance)	CP1W-CIF12
Software	Programming Software with 1 license	CXONE-AL01D-V4

Note: Tables include representative part numbers. Please consult the product page for more details.

NX1P –
Machine Automation Controllers

- Compact entry model with integrated motion and machine control. Connectivity to safety and vision systems
- Up to 4 axes of coordinated motion control plus 4 axes point to point control
- Expandable I/O using up to 8 NX series I/O cards on local bus
- Built in EtherCAT and EtherNet/IP ports
- Connect up to 16 EtherCAT Slaves
- Sysmac Studio IDE for flexible, scalable programming

🌐 Product Page

Built-In Digital I/O		Specifications	Number of Coordinated axes*	Number of point-to-point axes**	Total Axes	Option Boards	Model
Digital							
Inputs	Outputs						
14	10	1.5MB of programming memory, min cycle time up to 2ms	0	4	4	1 Slot	NX1P2-9024-DT1
24	16		2		6	2 Slots	NX1P2-1040-DT1
24	16		4		8		NX1P2-1140-DT1

* Coordinated Axes Include:
- Point to Point Point Positioning
- Synchronized Motion (Gearing/Camming)
- Multi-Axes Coordinated Motion (Circular/Linear Interpolation)
- Axes grouping

**Point to Point axes Include:
- Only Point to Point Positioning
- No Synchronized Motion
- No Multi-Axes Coordinated Motion
- No Axes Grouping

Note: PNP transistor Output options shown. For NPN options, go toautomation.omron.com

Option Boards

Type	Description	Communication Protocol	Model
Serial Communication	1 x RS-232C port Transmission Distance: 15 m Connector type: Spring terminal (9 terminals)	Host link, Modbus-RTU Master and no-protocol	NX1W-CIF01
	1 RS-422A/485 Transmission Distance: 50 m Connector type: Spring terminal (5 terminals)		NX1W-CIF11
	1 RS-422A/485 port (isolated) Transmission Distance: 500 m Connector type: Spring terminal (5 terminals)		NX1W-CIF12
Analog Inputs and Outputs	2 x Analog inputs Voltage input: 0 to 10 V (Resolution: 1/4,000) Input current: 0 to 20 mA (1/2,000) Connector type: Spring terminal (5 terminals)		NX1W-ADB21
	2 x Analog inputs / 2 x Analog output Voltage input: 0 to 10 V (Resolution: 1/4,000) Input current: 0 to 20 mA (1/2,000) Voltage output: 0 to 10 V (Resolution: 1/4,000) Connector Type: Spring terminal (8 terminals)		NX1W-MAB221

Note: The expansion cards of the NX1P machine controller line are the same as the NX Series I/O cards.
For information on virtual axes, refer to the catalog on the website automation.omron.com

Software and Switches

Type	Description	Model
Software	Sysmac Studio IDE Lite Version 1 License	SYSMAC-SE201L
Hub	Hub EitherCAT with 3 Ports	GX-JC03
	Hub EitherCAT with 3 Ports	**GX-JC06**
	Hub EitherNet/IP with 3 Ports	W451-03B
	Hub EitherNet/IP with 5 Ports	W451-05B

Note: Tables include representative part numbers. Please consult the product page for more details.

NX102 - Machine Automation Controller

- Compact controller integrates production line, safety systems, and IT systems
- EtherCAT (1 port) and EtherNet/IP (2 ports) communication on the same CPU
- OPC UA server functionality
- Up to 8 axes of coordinated motion plus 4 axes of point-to-point control
- Embedded SQL Client Option
- Connect up to 64 EtherCAT slaves
- Expandable IO using up to 32 NX Series I/O cards on local bus
- Sysmac Studio IDE for flexible, scalable programming

Product Page   Product Video

Family	Specifications	Number of Coordinated axes *	Number of point-to-point axes **	Total Axes	SQL	Model
NX102	5 MB of programming memory, Min. cycle up to 1ms	0	4	4	No	NX102-9000
					Yes	NX102-9020
		2		6	No	NX102-1000
					Yes	NX102-1020
		4		8	No	NX102-1100
					Yes	NX102-1120
		8		12	No	NX102-1200
					Yes	NX102-1220

Note: The NX-END02 terminal cover is included with the NX102. The HMC-SD291 memory card is supplied with the NX102-_ _ 20. The battery is not mounted when the product is shipped. Refer to the datasheet for details.

For information on virtual axes, refer to the catalog on Omron website automation.omron.com

* Coordinated Axes Include:
- Point to Point Point Positioning
- Synchronized Motion (Gearing/Camming)
- Multi-Axes Coordinated Motion (Circular/Linear Interpolation)
- Axes grouping

**Point to Point axes Include:
- Only Point to Point Positioning
- No Synchronized Motion
- No Multi-Axes Coordinated Motion
- No Axes Grouping

Software and Switches

Type	Description	Model
Software	Sysmac Studio IDE Lite Version 1 License	SYSMAC-SE201L
Hub	Hub EitherCAT with 3 Ports	GX-JC03
	Hub EitherCAT with 3 Ports	GX-JC06
	Hub EitherNet/IP with 3 Ports	W451-03B
	Hub EitherNet/IP with 5 Ports	W451-05B

Note: Tables include representative part numbers. Please consult the product page for more details.

NJ –
Machine Automation Controllers

- One integrated controller designed to meet extreme requirements in terms of logic sequence, motion control speed, accuracy, and system size
- EtherCAT and Ethernet IP communication on the same CPU
- Ability to manage logic, motion, safety and vision tasks
- Embedded SQL Client Option
- Expandable I/O Using up to 10 CJ Expansion cards
- Sysmac Studio IDE for flexible, scalable programming

🌐 Product Page

Family	Specifications	Number of axes	OPC UA	SQL	Model
NJ1	64 EtherCAT slaves, 3 MB of programming memory, Min. cycle time: 1ms	0	No	No	NJ101-9000
		0	No	Yes	NJ101-9020
		2	No	No	NJ101-1000
		2	No	Yes	NJ101-1020
NJ3	192 EtherCAT slaves, 5 MB of programming memory, Min. cycle time: 1ms	4	No	No	NJ301-1100
		8	No	No	NJ301-1200
NJ5	192 EtherCAT slaves, 20 MB of programming memory, Min. cycle time: 0.5 ms	16	Yes	No	NJ501-1300
		16	No	Yes	NJ501-1320

Note: For information on virtual axes, refer to the catalog on the website automation.omron.com

Power Supplies

Power Supplies	Capacity	RUN Indicator	Model
100 to 240VAC	30W	NO Relay	NJ-PA3001
24 VDC			NJ-PD3001

Software and Switches

Type	Description	Model
Software	Sysmac Studio IDE 1 License	SYSMAC-SE201L
Hub	Hub EtherCAT with 3 Ports	GX-JC03
	Hub EtherCAT with 6 Ports	GX-JC06
	Hub EtherNet/IP with 3 Ports	W4S1-03B
	Hub EtherNet/IP with 5 Ports	W4S1-05B

Note: Tables include representative part numbers. Please consult the product page for more details.

NX7 -
Machine Automation Controllers

- Highest performance Sysmac CPU, designed to address the most demanding industrial control and motion applications, laying the infrastructure for Big Data support
- EtherCAT (1 port) and EtherNet/IP (2 ports) communication on the same CPU
- Dual-core Motion
- 128 or 256 Axes of Motion
- Embedded SQL Client Option
- Sysmac Studio IDE for flexible, scalable programming

🌐 Product Page

Family	Specification	Number of Coordinated Axes	SQL	Model Number
NX7	80 MB of programming memory, minimum cycle time 0.125 ms	128	YES	NX701-1620

Power Supplies	Capacity	RUN Indicator	Model
100 to 240VAC	90W	NO Relay	NX-PA9001
24 VDC	70W		NX-PD7001

Software and Switches	Description	Model
Software	Sysmac Studio IDE Lite Version 1 License	SYSMAC-SE201L
Hub	Hub EitherCAT with 3 Ports	GX-JC03
	Hub EitherCAT with 3 Ports	GX-JC06
	Hub EitherNet/IP with 3 Ports	W451-03B
	Hub EitherNet/IP with 5 Ports	

NX-TC -
Multi-Loop Temperature Controller

- 2 or 4 loop models
- PID control
- Ethernet/IP&EtherCAT with PLC/Coupler
- Voltage out and Current Out models
- Ability to specify variable to output
- Heater Burnout detection

🌐 Product Page

Product Name	Number of channels	Input Type	Output	Output Capacity	CT Input Capacity	Control Type	Conversion Time	I/O Refreshing Method	Model
Temperature Control Unit 2Ch Type	2 Ch	Multi-input (Thermocouple & Resistance Thermometer)	Voltage (for SSR control)	2 points	2 points	Standard Control	50 m sec	Free-Run refreshing	NX-TC2405
				4 points	None	Heating & Cooling Control			NX-TC2407
Temperature Control Unity 4Ch Type	4 Ch			4 points	4 points	Standard Control			NX-TC3405
				4 points	None	Standard Control			NX-TC3406
				8 points	None	Heating & Cooling Control			NX-TC3407

Note: Tables include representative part numbers. Please consult the product page for more details.

NX –
Remote I/O

- Wide variety of high density remote I/O Modules
- Ideal match with Sysmac Machine automation controllers
- EtherCAT and EtherNet/IP coupler options
- Platform Agnostic. Easy connectivity to 3rd party systems
- Removable wiring terminals for easy system assembly and testing

🌐 Product Page

Type	Description	Model
Digital I/O	8 Digital Inputs (NPN)	NX-ID4342
	8 Digital Inputs (PNP)	NX-ID4442
	16 Digital Inputs (NPN)	NX-ID5342
	16 Digital Inputs (PNP)	NX-ID5442
	8 Relay NO Outputs	NX-OC4633
	8 Digital Outputs (NPN)	NX-OD4121
	8 Digital Outputs (PNP)	NX-OD4256
	16 digital outputs (NPN)	NX-OD5121
	16 digital outputs (PNP)	NX-OD5256
Analog I/O	4 4-20 mA Analog Inputs	NX-AD3203
	4 4-20mA Analog Outputs	NX-DA3203
	4 Analog Inputs -10 to +10 V	NX-AD3603
	4 Analog Outputs -10 to +10 V	NX-DA3603
Temperature control	4 Thermocouple Inputs	NX-TS3101
	4 RTD Inputs	NX-TS3201
Weighing	1 Input for Load Cell	NX-RS1201
Position control	1 Line-Driver Pulsed Output	NX-PG0122
	1 Incremental Encoder Input	NX-EC0122
Serial Communication	1 RS232C Interface	NX-CIF101
	1 RS485/422A Interface	NX-CIF105
IIoT	IO-Link Master Interface for 4 IO-Link Devices	NX-ILM400
Accessories	Additional Supply for I/Os (4A)	NX-PF0630
	Additional Supply for I/Os (10A)	NX-PF0730
	Additional Source for Communication Bus	NX-PD1000

COUPLERS Network	Communications Cycle	Current Consumption	Maximim I/O power supply current	Model
EtherCAT	250 to 4,000 µs	1.45 W or lower	4A	NX-ECC201
			10A	NX-ECC202
	125 to 10,000 µs	1.25 W or lower		NX-ECC203
EtherNet/IP	-	1.50W or lower		NX-EIC202

SLAVE UNIT Network	IO Data Update	Refresh Mode	Model
EtherCAT	1.5 ms	Free Run	NX-ECT101

Note: Tables include representative part numbers. Please consult the product page for more details.

NX-HTC -
Multi-Loop Temperature Controller

- 4 loop and 8 loop models
- 40% Footprint Reduction vs. NX-TC
- .01 °C Temperature Resolution when used with K-type, PT100 thermocouple
- Waveform Digitialization Function Monitors 16 different process features
- Disturbance Suppression Technology
- For use with PLC or IPC

🌐 Product Page

Model	Number of Channels	Input type	Output	Output Capacity	CT Input Capacity	Control type	Safety Standard
NX-HTC4505	8ch	Full Multi-input (Thermocouple, resistance thermometer and analog input)	Voltage output (for driving SSR)	8 points	8 points	Standard control	UC1, CE, RCM, KC, EAC
NX-HTC3510	4ch		Heating output: Voltage output (for driving SSR)	4 points	4 points	Heating and Cooling control	
			Cooling output: Linear current output				

Note: Tables include representative part numbers. Please consult the product page for more details.

Sysmac Studio-
Integrated Design Environment

- Configuration, programming, monitoring in a single interface
- Logic, motion and drives, safety, visualization, sensing, IoT in one project
- Built in Simulator
- One time license fee

🌐 Product Page

License Type	Part Number	# of Users
Sysmac Studio Standard Edition	SYSMAC-SE201L	1
	SYSMAC-SE203L	3
	SYSMAC-SE210L	10
	SYSMAC-SE230L	30
	SYSMAC-SE250L	50
	SYSMAC-SE2XXL	Site
Sysmac Studio LIte Edition	SYSMAC-LE201L	1
	SYSMAC-LE203L	3
	SYSMAC-LE210L	10
Upgrade from Lite to Standard	SYSMAC-LU501L	1
	SYSMAC-LE203L	3
	SYSMAC-LE210L	10
Sysmac Studio Vision Edition	SYSMAC-VE001L	1
Sysmac Studio Measurement Edit	SYSMAC-ME001L	1
Sysmac Studio NX/I-O Edition	SYSMAC-NE001L	1
Sysmac Studio Drive Edition	SYSMAC-DE001L	1
Sysmac Studio Safety Edition	SYSMAC-FE001L	1

OS	CPU		RAM	Display
Windows 7 (32-bit) Windows 8 (32-bit) Windows 8.1 (32-bit) Windows 10 (32-bit or 64-bit edition)	Minimum[1]	IBM AT or compatible with Intel® Celeron® processor 540 (1.8 Ghz)	2 GB	XGA 1,024 x 768, 16 million colors
	Recommended[2,3]	IBM AT or compatible with Intel® Core™ i5 M520 processor (2.4 GHz) or equivalent	4 GB min.	WXGA 1,280 x 800x 16 million colors

1. If you create a user program with a memory size that exceeds 20 MB, use the 64-bit edition of the operating system and 8 GB or more of RAM.
2. If the user program is large, we recommend that you use a 64-bit IBM AT or compatible with an Intel® Core™ i7 processor or better and 8 GB or more of RAM.
3. If you use the Robot Additional Option and execute Vision and Robot integrated simulations, use a 64-bit IBM AT or compatible with an Intel® Core™ i5 processor or better and 8 GB or more of RAM.

Note: Tables include representative part numbers. Please consult the product page for more details.

Sysmac Studio-
Integrated Design Environment

• Configuration, programming, monitoring in a single interface
• Logic, motion and drives, safety, visualization, sensing, IoT in one project
• Built in Simulator
• One time license fee

🌐 Product Page

		Sysmac Studio Standard	Sysmac Studio Lite	Sysmac Studio Vision	Sysmac Studio Measurement	Symac Studio Drive	Sysmac Studio Safety	Sysmac Studio NX
Logic	NX1P2	•	•					
	NX102	•	•					
	NJ1	•	•					
	NJ3	•						
	NJ5	•						
	NX7	•						
HMI	NA5	•	•					
I/O	NX I/O EtherCAT Coupler	•	•					
	NX I/O EtherNet/IP Coupler	•	•					•
Vision	FH	•	•	•				
	FHV7	•	•	•				
	FQM	•	•	•				
Safety	NX-SL3	•	•				•	•
	NX-SL5/CSG	•	•				•	
Motion	1S	•	•			•		
	G5	•	•			•		
Measurement	ZW	•	•		•			

Note: Tables include representative part numbers. Please consult the product page for more details.

NB - Basic Graphic HMI

• 65K Color TFT display with LED backlight
• Data Logging/Trending, Recipes, Alarms, Remote web viewing
• Graphics Library and Animation
• Free NB Designer programming software
• Preferred for Omron CP controllers

🌐 Product Page

Size	Description		Model
	Communication Port	Resolution	
3.5"	RS232C/RS422		NB3Q-TW00B-V1
5.6"	RS232C/RS422, Ethernet	320 × 234	NB5Q-TW01B-V1
5.6"	RS232C/RS422		NB5Q-TW00B-V1
7"	RS232C/RS422, Ethernet		NB7W-TW01B-V1
7"	RS232C/RS422	800 x 480	NB7W-TW00B-V1
10"	RS232C/RS422, Ethernet		NB10W-TW01B-V1

Note: For more information, refer to the catalog on the website automation.omron.com

NA - Advanced High Resolution Graphic Display

• Wide screen high resolution display with 16M colors
• Multimedia including video, Word, Excel and PDF viewers
• Sysmac Studio provides the integrated development environment
• Preferred for NJ/NX controllers

🌐 Product Page

Size	Description		Model
	Communication Port	Resolution	
7"		800 x 480	NA5-7W001B-V1
9"	2 Ethernet, USB, RS232		NA5-9W001B-V1
12.1"		1280 x 800	NA5-12W101B-V1
15.4"			NA5-15W101B-V1

Note: Part numbers are for black bezel. Silver bezel available.

Note: Tables include representative part numbers. Please consult the product page for more details.

Soft NA - Software to Emulate the NA Advanced Graphic Display on an Industrial PC

- Sysmac Studio provides the integrated development environment.
- Design or Re -Use applications from the NA Graphic display on your choice of Industrial PC. Omron NY Series of IPC preferred.
- Run Soft-NA and other applications such as Enterprise Resource Planning or others, on an IPC.
- Windows 10 OS based and preferred for NJ/NX controllers.
- Preferred for NJ/NX controllers

Product Page

Product Name	Specifications	Number of licenses	Media	Model
Soft-NA	The Soft-NA is software that displays information on FA manufacturing sites while providing safety, reliability, and maintainability as an industrial display on which operations can be preformed as necessary. The Soft-NA runs on the following OS: Windows 10 Pro Version 1903 or later 64 bit	- (Media only)	DVD	NA-RTSM
		1 license	USB dongle	NA-RTLD01
		3 licenses		NA-RTLD03
		10 licenses		NA-RTLD10

Note: Tables include representative part numbers. Please consult the product page for more details.

NY - Industrial PC

- No internal cables eliminates faults, maximizes uptime
- Unique simplified thermal design cuts downtime
- Powerful Intel® CoreTM technology for optimum performance
- Options for models with no moving parts - increasing reliability
- Box and Panel mount versions

🌐 Product Page

Family	Operational System	CPU	RAM Memory	Storage	Type	Model
NYB	Windows 10 IoT Enterprise LTSB 64bit	Intel Xeon E3-1515M v5	8GB	128GB SSD	Box PC	NYB1E-313K1
		Intel Core i7-7820EQ				NYB27-314K1
		Intel Core i5-7300U				NYB35-313K1
		Intel Core i5-7300U				NYB35-313K1
		Intel Celeron 2980U				NYB2C-313K1
		Intel Core ATOM E3940		64GB SSD		NYB2A-30450
NYP		Intel Core i7-7820EQ		128GB SSD	Monitor Panel 12", 15", 19"	NYP27-314K1-15WC1000
		Intel Core i5-7300U				NYP35-30350-19WC1000
		Intel Core i5-7300U		64GB SSD		NYP35-31391-15WC1000
		Intel Celeron 2980U		128GB SSD		NYP2C-313K2-15WC1000
		Intel Core ATOM E3940				NYP2A-30460-19WC1000

Note: The NYB family does not come with an industrial monitor.

NYM - Industrial Monitor

- Multitouch projected capacitive touchscreen
- False touch detection (palm, water)
- Operator can wear gloves
- Optional NY Monitor Link interface for connectivity up to 100m
- Custom logo option

🌐 Product Page

Item	Size	Resolution	Interface	Model
Industrial Monitor	18.5"	1,280 x 800	DVI-D	NYM19W-C1000
	15.4"			NYM15W-C1000
	12.1"			NYM12W-C1000
	18.5"		NY Monitor Link	NYM19W-C1060
	15.4"			NYM15W-C1060
	12.1"			NYM12W-C1060

Note: Tables include representative part numbers. Please consult the product page for more details.

NY5 - IPC Machine Controller

- Models available with AI function and with NC function
- Real Time Operating System runs independently of the Windows OS
- Program the machine control with Sysmac Studio using ladder, ST, SFC.
- Machine control program portable to modular NJ controller
- Available in box and panel versions

Product Page

Operational System	CPU	Number of axes	RAM Memory	Storage	Type	Model
Windows Embedded Standard 7 64 bit	Intel Core i7 4700EQ	64	8 GB	64GB SSD	15.4" Monitor Panel	NY532-1500-112213910
		32				NY532-1400-112213910
		16				NY532-1300-112213910

Note: For models with NC function or with Artificial Intelligence function, refer to the catalog on the website automation.omron.com

Omron AVEVA Edge

- Omron AVEVA™ Edge offers an Integrated Development Environment (IDE) with the Omron driver set that allows you to design once and deploy anywhere for most Omron control platforms.
- Omron AVEVA™ Edge SCADA – The full Windows based runtime offers all the tools you need for advanced SCADA applications
- Omron AVEVA™ Edge HMI – AVEVA Edge for embedded systems such as Windows Embedded operating systems. The small footprint makes AVEVA Edge HMI ideal for embedded and edge machines

Product Page

Development or Development and Runtime	Runtime
Omron Aveva Edge Unlimited Tags	
Omron Aveva Edge 512K Tags	Omron Aveva Edge 512K Tags
Omron Aveva Edge 64K Tags	Omron Aveva Edge 64K Tags
Omron Aveva Edge 32K Tags	Omron Aveva Edge 32K Tags
Omron Aveva Edge 16K Tags	Omron Aveva Edge 16K Tags
Omron Aveva Edge 4K Tags	Omron Aveva Edge 4K Tags
Omron Aveva Edge 1.5K Tags	Omron Aveva Edge 1.5K Tags
Omron Aveva Edge 300 Tags	Omron Aveva Edge 300 Tags
Omron Aveva Edge 150 Tags	Omron Aveva Edge 150 Tags

Note: Tables include representative part numbers. Please consult the product page for more details.

MicroHAWK V320-F/V330-F/V420-F/V430-F Barcode Reader

- Ultracompact readers, with several model options and setting possibilities
- High performance in reading 1D and 2D codes on any surface, including Direct Part Marks
- Extremely simple setting via browser - WebLink, without the need for software installation
- Autofocus with liquid lens (V420-F and V430-F)

🌐 Product Page   📹 Product Video

Line	Acquisition	Sensor	Focus	Communication	Lighting	IP	Power	Model
V320-F	52 fps	0.34 MP Mono	Fixed 102mm	RS-232C, USB/HID, or Ethernet via USB (USB 2.0 Full-Speed)	Built-in White & Red	IP40	5VDC	V320-F102W03M-NNX
V320-F	40 fps	1.2 MP Mono	Fixed 102mm	RS-232C, USB/HID, or Ethernet via USB (USB 2.0 Full-Speed)	Built-in White & Red	IP40	5VDC	V320-F102W12M-NNX
V330-F	60 fps	0.34 MP Mono	Fixed 102mm	Ethernet TCP/IP	Built-in White & Red	IP40	36 to 57 VDC (PoE, IEEE 802.3af)	V330-F102W03M-NNX
V330-F	42 fps	1.2 MP Mono	Fixed 102mm	Ethernet TCP/IP	Built-in White & Red	IP40	36 to 57 VDC (PoE, IEEE 802.3af)	V330-F102W12M-NNX
V420-F	60 fps	0.34 MP Mono	Autofocus 50-300mm	RS-232C, USB/HID, or Ethernet via USB (USB 2.0 Full-Speed)	Built-in White & Red + External Red (8 LEDs)	IP54	5VDC	V420-F000W03M-SRX
V420-F	42 fps	1.2 MP Mono	Autofocus 50-300mm	RS-232C, USB/HID, or Ethernet via USB (USB 2.0 Full-Speed)	Built-in White & Red + External Red (8 LEDs)	IP54	5VDC	V420-F000W12M-SRX
V420-F	42 fps	1.2 MP Mono	Autofocus 75-1200mm	RS-232C, USB/HID, or Ethernet via USB (USB 2.0 Full-Speed)	Built-in White & Red + External Red (8 LEDs)	IP54	5VDC	V420-F000L12M-SRX
V430-F	60 fps	0.34 MP Mono	Autofocus 50-300mm	RS-232C, Ethernet TCP/IP, EtherNet/IP, PROFINET I/O	Built-in White & Red + External Red (8 LEDs)	IP65/67	5 to 30 VDC	V430-F000W03M-SRX
V430-F	42 fps	1.2 MP Mono	Autofocus 50-300mm	RS-232C, Ethernet TCP/IP, EtherNet/IP, PROFINET I/O	Built-in White & Red + External Red (8 LEDs)	IP65/67	5 to 30 VDC	V430-F000W12M-SRX
V430-F	42 fps	1.2 MP Mono	Autofocus 75-1200mm	RS-232C, Ethernet TCP/IP, EtherNet/IP, PROFINET I/O	Built-in White & Red + External Red (8 LEDs)	IP65/67	5 to 30 VDC	V430-F000L12M-SRX
V430-F	42 fps	1.2 MP Mono	Autofocus 50-300mm	RS-232C, Ethernet TCP/IP, EtherNet/IP, PROFINET I/O	External Red (24 LEDs)	IP65/67	5 to 30 VDC	V430-F000M12M-RRX

Cables And Accessories

Product	Type	Description	Model
V320-F	Power, I/O, Serial and USB	Cable with RJ50 connector, 3m	V320-W8-3M
V320-F	RJ50/DB-15 Converter	RJ50 Cable for DB-15, 1m	V320-WR-1M
V320-F	Programming	DB-15 cable for USB, 1m	V420-WUB-1M
V330-F	Standard Ethernet Cable	RJ45 Cable for RJ45	XS6W-5PURBSS_00CM-G
V420-F	Programming	DB-15 cable for USB, 1m	V420-WUB-1M
VF430-F	Power, I/O and Serial	Cable with 12-pin M12 connector	V430-W8-_M
VF430-F	Ethernet	Cable with 8-pin M12 connector for RJ45	V430-WE-_M

Note: Tables include representative part numbers. Please consult the product page for more details.

V410H - Handheld Barcode Reader

- Labels or Direct Part Mark barcode reading
- High resolution 1280 x 800 pixels
- Read ranges from contact to 28 inches
- Intuitive and insightful WebLink PC utility and run time with image storage, statistics, reader discovery, troubleshooting and extensive tool tips

🌐 Product Page

Name	Decoding Algorithms	Read Range (10 mil DataMatrix)	Communication	IP Rating	Application	Model
V410-H XD	1D/2D, X-Mode	0 - 12 cm / 0 - 4.6 in	RS-232 / USB	IP52	Direct Part Mark and Labels	V410-HDS4608XD
V410-H SR	1D/2D	2.5 – 29 cm / 1 –11.5 in			Labels only	V410-HDS4608SR
V410-H HC		0.5 – 24 cm / 0.2 – 9.5 in			Healthcare / Disinfectant resistant	V410-HDS4608HC

Cables And Accessories

Product	Type	Description	Model
V410-H	Cable (Required)	CABLE ASSY, UNIVERSAL STYLE 3 USB, 2m, SHIELDED MOD PLUG-V410-H	V410-WUB-2M
	Cable	CBL ASSY, RS232, DB9F, 2m, for connection to communication module or PLC	V410-WR-2M
	Power Supply	Power Supply required for V410-WR-2M RS-232 Cable	V410-AC0-1
	Intelligent Stand	Stand/holder for using in Hands-free mode	V410-AS0
	Communication Module	Serial to Ethernet TCP and EIP DIN rail mounted converter	OEI-EA3600-R1CP-11
	Cable	2m Serial Cable for OEI-EA3600	OEI-CBA-RF2-CO9ZAR

Note: Tables include representative part numbers. Please consult the product page for more details.

V680S - RFID Reader/Writer

- All in one controller, amplifier, antenna
- Reads and writes to any ISO 18000-3 compliant RFID Tag
- Diagnostic function for easy setup and troubleshoooting
- Ethernet, EtherNet/IP and PROFINET connectivity

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Dimensions (mm)	Network	Model
50 x 50 x 30	EtherNet/IP	**V680S-HMD63-EIP**
	PROFINET	V680S-HMD63-PNT
	Modbus TCP (TCP/IP)	V680S-HMD63-ETN
75 x 75 x 40	EtherNet/IP	V680S-HMD64-EIP
	PROFINET	V680S-HMD64-PNT
	Modbus TCP (TCP/IP)	V680S-HMD64-ETN
120 x 120 x 40	EtherNet/IP	V680S-HMD66-EIP
	PROFINET	V680S-HMD66-PNT
	Modbus TCP (TCP/IP)	V680S-HMD66-ETN

Tags

Type	Memory	Dimensions (mm)	Installation	Model
No Battery	2 K	40 x 40 x 5	For assembly on non-metallic faceted surface	V680S-D2KF67
			For assembly on metallic faceted surface	V680S-D2KF67M
		86 x 54 x 10	For assembly on non-metallic faceted surface	V680S-D2KF68
			For assembly on metallic faceted surface	V680S-D2KF68M
	8 K	40 x 40 x 5	For assembly on non-metallic faceted surface	V680S-D8KF67
			For assembly on metallic faceted surface	V680S-D8KF67M
		86 x 54 x 10	For assembly on non-metallic faceted surface	V680S-D8KF68
			For assembly on metallic faceted surface	V680S-D8KF68M

Note: For tags in other formats, or labels, refer to Omron website.

Note: Tables include representative part numbers. Please consult the product page for more details.

V780 - UHF Long Range RFID Reader/Writer

- All-in-one antenna/amplifier/controller with up to 6m of read/write range
- Ability to network up to 7 slave antennas with a master for increased tag reading area
- Web browser based setup and configuration with advanced diagnostics
- Ethernet (Modbus TCP, EtherNet/IP™) as a standard feature

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Dimensions (mm)	Network	Applicable countries	Model
250 × 250 × 70	Modbus/TCP base (TCP/IP)	United States and Canada	V780-HMD68-ETN-US
		Mexico	V780-HMD68-ETN-MX
	EtherNet/IP	United States and Canada	V780-HMD68-EIP-US
		Mexico	V780-HMD68-EIP-MX
	(Slave Reader/Writer for Multi-Reader/Writer function)	United States and Canada	V780-HMD68-ETN-US-S
		Mexico	V780-HMD68-ETN-MX-S

Cables for V680S and V780

Type of Communication	Length	Power cable	Communication cable
V680S Modbus TCP (TCP/IP)	2 Meters	V680S-A41 2M*	
	5 Meters	V680S-A41 5M*	
	10 Meters	V680S-A41 10M*	
V780 EtherNet/IP and PROFINET	1 Meter	XS5F-D421-C80-F	XS5W-T421-CME-K
V680S EtherNet/IP and PROFINET	2 Meters	XS5F-D421-D80-F	XS5W-T421-DMC-K
	5 Meters	XS5F-D421-G80-F	XS5W-T421-GMC-K
	10 Meters	XS5F-D421-J80-F	XS5W-T421-JMC-K

Note: * Interface Cable with V680S Special Connector to Flying Leads for Power and RJ45 for Communications

Note: Tables include representative part numbers. Please consult the product page for more details.

LVS-95XX - Offline Verifier

- Verify 1D, 2D and direct part marks
- Software automatically selects best lighting performance from integrated red or white dome and 30° angle lighting
- Validates printed barcodes to ISO/IEC, ANSI, GS1, and UDI print quality standards

🌐 Product Page

Type	Field of View	Codes	X-Dimension (min)		Lighting	Power	Communication	Model
			1 D	2 D				
LVS-9510 Desktop	113mm x 85mm	1D & 2D	7.0 mils	9.8 mils	Red (filtered)	12VDC (Supply)	USB 2.0	9510-5-45
LVS-9580 DPM/ LVS-9585 DPM	76mm x 57mm	1D, 2D & DPM	5.0 mils	5.9 mils	Red (filtered)	USB Powered		9580-C-3
	45mm x 45mm			5.9 mils				9580-DPM
	45mm x 45mm			5.9 mils	Red, White & 30° angle			9585-DPM

V275 - Inline Verifier and Print Quality Inspection

- Inspect 100% of labels for print quality.
- Verify 1D and 2D codes to ISO standards.
- Ensure compliance with regulations and quality requirements.
- Check for cosmetic blemishes and errors in printed data.
- Avoid costly chargebacks, recalls, and supply chain disruption.

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Printer	Print Resolution	Print Speed (max)	Label Width (max)	X-Dimension (min)		Font Size (point)	Communication	Model
				1 D	2 D			
Zebra ZT610	300 dpi	304mm (12")/seg	104mm (4.1")	6.6 mils	10.0 mils	5 point	5 pt Ethernet (via PC)	V275-P46Z61030-CC
Zebra ZT610	600 dpi	152mm (6")/seg	104mm (4.1")					V275-P46Z61060-CC
Zebra ZT620	300 dpi	203mm (8")/seg	167mm (6.6")					V275-P86Z62030-CC

Note: 10.0 mils if Code 1D is vertically printed (ladder orientation)

Note: Tables include representative part numbers. Please consult the product page for more details.

MicroHAWK F430/330 –
Smart Camera

- Ultracompact Smart Cameras
- Various model options and configuration possibilities
- Two programming software options: AutoVISION (Simplified) or Visionscape (Complete)
- Autofocus with liquid lens (F420-F and F430-F)
- Degree of protection up to IP67

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Family	Sensor Color	Sensor Resolution	Shutter Type	Lens Type/ Mount	Focus Distance	Software or License	Model
F320	Monochrome	0.34 MP	Global	Integrated - fixed focus	102 mm	AutoVISION + Verification + Visionscape	F320-F102W03M-NNV
	Monochrome	1.2 MP					F320-F102W12M-NNV
	Color	5 MP	Rolling				F320-F102W50C-NNV
F330	Monochrome	0.34 MP	Global				F330-F102W03M-NNV
	Monochrome	1.2 MP					F330-F102W12M-NNV
	Color	5 MP	Rolling				F330-F102W50C-NNV
F420	Monochrome	1.2 MP	Global	Autofocus high speed liquid lens	75 to 1200 mm		F420-F000L12M-SRV
	Color	5 MP	Rolling		50 to 300 mm	AutoVISION Sensor	F420-F000M50C-SWS
	Monochrome	0.34 MP	Global			AutoVISION + Verification + Visionscape	F420-F000W03M-SRV
	Monochrome	1.2 MP					F420-F000W12M-SRV
	Color	5 MP	Rolling				F420-F000W50C-SWV
F430	Monochrome	1.2 MP	Global		75 to 1200 mm		F430-F000L12M-SRV
	Monochrome	1.2 MP			50 to 300 mm		F430-F000M12M-RRV
	Monochrome	1.2 MP				AutoVISION + Verification	F430-F000M12M-SRA
	Monochrome	1.2 MP				AutoVISION + Verification + Visionscape	F430-F000M12M-SRV
	Monochrome	1.2 MP				AutoVISION + Verification	F430-F000M12M-SWA
	Monochrome	0.34 MP				AutoVISION + Verification + Visionscape	F430-F000W03M-SRV
	Monochrome	1.2 MP				AutoVISION + Verification + Visionscape	F430-F000W12M-SRV
	Color	5 MP	Rolling			AutoVISION Sensor	F430-F000W50C-SWS
	Color	5 MP				AutoVISION + Verification + Visionscape	F430-F000W50C-SWV

Note: Tables include representative part numbers. Please consult the product page for more details.

V440-F C-Mount Code Reader

- 5MP global shutter sensor @ 36FPS
- C-Mount lens compatible
- Designed for use with NERLITE Smart Series ring lights
- Power over Ethernet (PoE) or direct 24VDC
- Gigabit Ethernet with locking RJ45 port
- Weblink 3.0 with Enhanced functionality including Matrix Mode and Configuration Database
- IP40-rated

🌐 Product Page

Part Number	Sensor	Optics	Communications	IP Rating	Decode Algorithms
V440-FXXXY50M-NNP	5 MP, Global Shutter, Monochrome	C-Mount	RS232C, Ethernet, EtherNet/IP, PROFINET	IP 40	1D/2D Plus Mode
V440-FXXXY50M-NNX	5 MP, Global Shutter, Monochrome	C-Mount	RS232C, Ethernet, EtherNet/IP, PROFINET	IP 40	1D/2D X-Mode

Note: Lenses, Lights and Cables are selected separately, based on the individual application. Please refer to the V440-F data sheet for all available options.

Mounting Options

Part Number	Description
V440-AM0	1/4-20 Mounting Block for V440-F Reader

NERLITE Smart Series Ring Lights

Part Number	Description
NER-011660900G	R-70, 70mm, Smart Series Ring Light
V440-AM1	R-70 Smart Series Ring Light Mounting Kit
NER-011661100G	R-100, 100mm, Smart Series Ring Light
V440-AM2	R-100 Smart Series Ring Light Mounting Kit

Industrial GigE Ethernet Cable

Part Number	Description	Length
98-000133-01	RJ45 to RJ45, Industrial High Flex GigE Ethernet Cable with Jack Screws	2 Meters
98-000134-01	RJ45 to RJ45, Industrial High Flex GigE Ethernet Cable with Jack Screws	5 Meters
98-000134-02	RJ45 to RJ45, Industrial High Flex GigE Ethernet Cable with Jack Screws	7 Meters

Power & I/O Cable

Part Number	Description	Length
V430-W8-3M	Power & I/O Cable, M12 to Flying Leads Cable, Straight	3 Meters
V430-W8-5M	Power & I/O Cable, M12 to Flying Leads Cable, Straight	5 Meters
61-9000135-01	Y Cable, Reader & Smart Light Power (Continuous On)	1 Meter
61-9000137-01	Y Cable, Reader & Smart Light Power (Strobe Control)	1 Meter

Note: Tables include representative part numbers. Please consult the product page for more details.

F440 Smart Camera

- 5 MP monochrome global shutter sensor
- Up to 35 FPS image acquisition
- Standard C-Mount lens compatible lens
- Optics & Lighting flexibility to solve complex vision applications
- AutoVISION offers twelve easy to use tools that allow users to setup and star jobs within 3 steps

Product Page

Appearance	Description	Part Number
	F440-F, No Optics, 5 MP, Mono, No Light, AutoVISION Sensor	F440-FXXXY50M-NNS
	F440-F, No Optics, 5 MP, Mono, No Light, AutoVISION + Verification	F440-FXXXY50M-NNA
	F440-F, No Optics, 5 MP, Mono, No Light, AutoVISION + Verification + Visionscape	F440-FXXXY50M-NNV

Note 1: F440-F cameras are sold without lenses, lights, cables, or mounting. All of these items can be found in later sections of this datasheet.
Note 2: The F440-F uses all the same cables and interconnect accessories as the V440-F. The F440-F uses standard Ethernet cables. High-Flex TPE cables and Robot Ethernet cables are shown later in this datasheet.

Software License	Vision Toolset
F440-FXXXY50M-NNS: AutoVISION Sensor	Locate Tool, Presence/Absence Tool, Count Tool, Measure Tool, Logic Tool
F440-FXXXY50M-NNA: AutoVISION + Verification	All of the Above + Decode Tool, OCR Tool, Match Strings Tool, String Format Tool, OCV Tool, Symbol Quality Verification Tool
F440-FXXXY50M-NNV: AutoVISION + Verification + Visionscape	All of the Above + Visionscape Extensive Machine Vision Tool Set

Note: Tables include representative part numbers. Please consult the product page for more details.

FHV7 - Smart Camera

- Several model options and setting possibilities (from 0.4MP to 12MP)
- Dual-Core CPU providing up to 430 fps (0.4MP) acquisition
- Multicolor lighting module (red, green, blue, and infrared, with individual control)
- Degree of protection up to IP67

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Family	Sensor Color	Sensor Resolution	Shutter Type	Lens Type/Mount	Software or License	Model
FHV7	Monochrome	0.4 MP	Global	C Mount with option for autofocus accessory	FHV Software or Sysmac Studio Software with License	FHV7H-M004-C
		1.6 MP				FHV7H-M016-C
		3.2 MP				FHV7H-M032-C
		5 MP		C Mount		FHV7H-M050-C
	Color	0.4 MP		C Mount with option for autofocus accessory		FHV7H-C004-C
		1.6 MP				FHV7H-C016-C
		3.2 MP				FHV7H-C032-C
		5 MP		C Mount		FHV7H-C050-C
		6.3 MP	Rolling	C Mount with option for autofocus accessory		FHV7H-C063R-C
		12 MP		C Mount		FHV7H-C120R-C
	Monochrome	6.3 MP		C Mount with option for autofocus accessory		FHV7H-M063R-C
		12 MP		C Mount		FHV7H-M120R-C

Lenses

Focal Distance	C-Mount	Autofocus (Standard)	Autofocus (High-speed)
6mm	—	FHV-LEM-S06	FHV-LEM-H06
8mm	SV-0814H	—	—
9mm	—	FHV-LEM-S09	—
12mm	SV-1214H	FHV-LEM-S12	—
16mm	SV-1614H	FHV-LEM-S16	—
19mm	—	—	FHV-LEM-H19
25mm	SV-2514H	FHV-LEM-S25	—

Note: For C-Mount lenses, please refer to Vision Accessory Catalog for complete lens setup. Autofocus lenses and Lighting modules will fit on 0.4MP, 1.6MP, 3.2MP and 6.3MP cameras. You can also refer to the FHV7 configurator on the product page.

Lighting Modules

Light Color	Model
Multicolor	FHV-LTM-MC
Red	FHV-LTM-R
White	FHV-LTM-W
IR	FHV-LTM-IR

Accessories

Type	Connector	
	Straight	Right-angle
Ethernet Cable	FHV-VNB _M[1]	FHV-VNLB _M[1]
I/O Cable	FHV-VDB _M[1]	FHV-VDLB _M[1]
Data Unit Cable	FHV-VUB _M[1]	FHV-VULB _M[1]
I/O Cable for Parallel Interface Data Unit	XW2Z-S013-_[2]	—

Smart Camera Data Unit

Type	Inputs / Outputs	EtherCAT Communication	Model
Parallel Interface	12 Inputs / 24 Outputs	No	FHV-SDU10
EtherCAT Interface	1 Input / 2 Outputs	Yes (Slave)	FHV-SDU30

Note: Tables include representative part numbers. Please consult the product page for more details.

FH - Vision System

- High performance Vision System with more than 100 program tools
- Connection for 2, 4 or 8 cameras on the same controller with independent triggers
- High resolution cameras up to 20 MP
- Real image processing (16 million colors)

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Controllers

Item	CPU and Processing	Communication	EtherCAT	No. of cameras	Model
Box type controller	High-Speed Controller (4 core)	EtherNet/IP, EtherCAT, EtherNet TCP/UDP, PROFINET, Serial, Parallel I/O	Yes	2	FH-5050
				4	FH-5050-10
				8	FH-5050-20
	High-Speed Controller (2 core)			2	FH-2050
				4	FH-2050-10
				8	FH-2050-20

Cameras

Item	Description	Model	
		Color	Monochrome
CMOS Camera (Rolling Shutter)	5MP, 71.7ms image acquisition time	FH-SC05R	FH-SM05R
	20.4MP, 42.6ms image acquisition time	FH-SC21R	FH-SM21R
Newer high speed CMOS Camera (Global Shutter)	12MP, 24.9ms image acquisition time[1]	FH-SCX12	FH-SMX12
	5MP, 10.3ms image acquisition time[1]	FH-SCX05	FH-SMX05
	0.4MP, 1.9ms image acquisition time	FH-SCX	FH-SMX
High speed CMOS Camera (Global Shutter)	M42 Mount 12MP, 25.7ms image acq time[1]	FH-SC12	FH-SM12
	4MP, 8.5ms image acquisition time[1]	FH-SC04	FH-SM04
	2MP, 4.6ms image acquisition time[1]	FH-SC02	FH-SM02
	0.3MP, 3.3ms image acquisition time	FH-SC	FH-SM
CCD Camera (Global Shutter)	2MP, 33.3ms image acquisition time	FZ-SC2M	FZ-S2M
	0.3MP, 12.5ms image acquisition time	FZ-SC	FZ-S
	0.3MP, 4.9ms image acquisition time	FZ-SHC	FZ-SH
Integrated CMOS Camera (Global Shutter)	0.3MP, 16.7ms image acquisition time	FZ-SQ100N	—

1. Frame rate in high speed mode when the camera is connected using two camera cables.

Type	Description	Model	Type of Camera	Focal Distance	Model
Cable for camera	2m Length	FZ-VS3 2M	FZ-S_2M FZ-S_5M2 FH-S_05R (2MP and 5MP)	6mm	SV-0614H
	5m Length	FZ-VS3 5M		8mm	SV-0814H
	10m Length	FZ-VS3 10M		12mm	SV-1214H
				16mm	SV-1614H
Parallel cable for I/Os	2m Length	XW2Z-S013-2		25mm	SV-2514H
	5m Length	XW2Z-S013-5	FZ-S_ FH-S_ (0.3MP)	6mm	SV-0614V
				8mm	SV-0813V
				12mm	SV-1214V
				16mm	SV-1614V
				25mm	SV-2514V

Note: Tables include representative part numbers. Please consult the product page for more details.

M Series GigE Vision Cameras

- Power over Ethernet capable
- High Resolution, High Speed, CMOS Sensors.
- Small Form Factor: 29 x 29mm & 30 x 40mm versions.
- IEEE1588 Certified with GigE Vision 2.1
- Compatible with Omron AutoVISION & VisionScape

🌐 Product Page

Global shutter models

Monochrome/Color	Resolution	Frame Rate	Effective Pixels (H × V)	Sensor Size	Cell Size (µm)	Sensor	Lens Mount	Model
Monochrome	0.4M	282.8 fps	720 × 540	1/2.9	6.9 × 6.9	IMX287	C	STC-MBS43POE
Color								STC-MCS43POE
Monochrome	0.5M	166.5 fps	816 × 624	1/1.7	9 × 9	IMX433	C	STC-MBS52POE
Color								STC-MCS52POE
Monochrome	1.3M	61 fps	1280 × 1024	1/1.8	5.3 × 5.3	EV76C560	C	STC-MBE132POE
Color								STC-MCE132POE
Monochrome	1.6M	70.7 fps	1440 × 1088	1/2.9	3.45 × 3.45	IMX273	C	STC-MBS163POE
Color								STC-MCS163POE
Monochrome	2M	54.6 fps	1624 × 1240	1/1.7	4.5 × 4.5	IMX430	C	STC-MBS202POE
Color								STC-MCS202POE
Monochrome	2.3M	41.6 fps	1920 × 1200	1/1.2	5.86 × 5.86	IMX249	C	STC-MBS231POE
Color								STC-MCS231POE
Monochrome	3.2M	34.9 fps	2048 × 2048	2/3	3.45 × 3.45	IMX265	C	STC-MBS312POE
Color								STC-MCS312POE
Monochrome	5M	21.9 fps	2448 × 2048	2/3	3.45 × 3.45	IMX264	C	STC-MBS500POE
Color								STC-MCS500POE
Monochrome	8.9M	12.4 fps	4096 × 2160	1	3.45 × 3.45	IMX267	C	STC-MBS881POE
Color								STC-MCS881POE
Monochrome	12.3M	8.9 fps	4096 × 3000	1.1	3.45 × 3.45	IMX255	C	STC-MBS122BPOE
Color								STC-MCS122BPOE

Note: Tables include representative part numbers. Please consult the product page for more details.
Note: Please refer to Vision Accessory Catalog for complete lens setup.

M Series GigE Vision Cameras (continued)

- Power over Ethernet capable
- High Resolution, High Speed, CMOS Sensors.
- Small Form Factor: 29 x 29mm & 30 x 40mm versions.
- IEEE1588 Certified with GigE Vision 2.1
- Compatible with Omron AutoVISION & VisionScape

Product Page

Rolling shutter models

Monochrome/Color	Resolution	Frame Rate	Effective Pixels (H × V)	Sensor Size	Cell Size (µm)	Sensor	Lens Mount	Model
Monochrome	5M	14 fps	2592 × 1944	1/2.5	2.2 × 2.2	MT9P031	C	STC-MBA503POE
Color								STC-MCA503POE
Monochrome	6.4M	17.4 fps	3072 × 2048	1/1.8	2.4 × 2.4	IMX178	C	STC-MBS642POE
Color								STC-MCS642POE
Monochrome	10M	10.3 fps	3856 × 2764	1/2.3	1.67 × 1.67	MT9J003	C	STC-MBA1002POE
Monochrome	12M	9.2 fps	4000 × 3000	1/1.7	1.85 × 1.85	IMX226	C	STC-MBS1242POE
Color								STC-MCS1242POE
Monochrome	20.4M	5.5 fps	5472 × 3648	1	2.4 × 2.4	IMX183	C	STC-MBS2041POE
Color								STC-MCS2041POE

Screw-Fastened GigE Cables

Length	Model
3 m	FJ-VSG 3M
5 m	FJ-VSG 5M
10 m	FJ-VSG 10M
20 m	FJ-VSG 20M
40 m	FJ-VSG 40M

Power Supply and I/O Cables

Length	Model
3 m	FJ-VSP2 3M
5 m	FJ-VSP2 5M
10 m	FJ-VSP2 10M

Note. Please connect the cables according to the external connector specifications prescribed in your camera's specification documents, for faulty wiring can cause failure.

FS Series GigE Vision Line Scan Cameras

- Power over Ethernet capable
- Compact case designed for easy mounting
- Offered in 2K, 4K, or 8K
- Available in Single & Dual Line Monochrome and Dual Line Color Models.
- Action Command Triggering: Trigger multiple cameras simultaneously with one command.

🌐 Product Page

Monochrome/Color	Resolution	Line Rate	Pixel size	Sensor	Sensor Type	Lens Mount	Model
Monochrome	2048 × 1	51 kHz	7 µm	DR-2K-7	Single	C	FS-B2KU7GES-C
						F	FS-B2KU7GES-F
						M42	FS-B2KU7GES-M42
Monochrome	4096 × 1	26 kHz	7 µm	DR-4K-7	Single	F	FS-B4KU7GES-F
						M42	FS-B4KU7GES-M42
Monochrome	4096 × 1	26 kHz	3.5 µm	DR-4K-3.5	Single	C	FS-B4KU35GES-C
						F	FS-B4KU35GES-F
						M42	FS-B4KU35GES-M42
Monochrome	8192 × 1	13 kHz	3.5 µm	DR-8K-3.5	Single	F	FS-B8KU35GES-F
						M42	FS-B8KU35GES-M42
Monochrome	2048x1	26kHz	7 µm	DR-2X2K-7-inver	Dual	C	FS-B2KU7DGES-C
						F	FS-B2KU7DGES-F
						M42	FS-B2KU7DGES-M42
Monochrome	4096x2	13kHz	7 µm	DR-2X4K-7-inver	Dual	F	FS-B4KU7DGES-F
						M42	FS-B4KU7DGES-M42
Color	2048x1	26kHz	7 µm	DR-2X2K-7-inver-RGB	Dual	C	FS-C2KU7DGES-C
						F	FS-C2KU7DGES-F
						M42	FS-C2KU7DGES-M42
Color	4096x2	13kHz	7 µm	DR-2X4K-7-inver-RGB	Dual	F	FS-C4KU7DGES-F
						M42	FS-C4KU7DGES-M42

Screw-Fastened GigE Cables

Length	Model
3 m	FJ-VSG 3M
5 m	FJ-VSG 5M
10 m	FJ-VSG 10M
20 m	FJ-VSG 20M
40 m	FJ-VSG 40M

Power Supply and I/O Cables

Length	Model
3 m	FJ-VSP2 3M
5 m	FJ-VSP2 5M
10 m	FJ-VSP2 10M

Note. Please connect the cables according to the external connector specifications prescribed in your camera's specification documents, for faulty wiring can cause failure.

1080p HD Output

- True HD 1080p Resolution at 60 FPS
- Easily programmable user profiles
- Optional Wired Remote Control for on-the-fly changes

🌐 Product Page

Model	Monochrome/Color	Resolution	Frame Rate	Effective Pixels (HxV)	Sensor Size	Cell Size (µm)	Sensor	Lens Mount	General Specifications
STC-HD213DV	Color	1080P/1080i	60 fps	1920x080	1/2.9	2.9x2.9	IMX291	C	With Memory
STC-HD213DV-CS								CS	
STC-HD213DVN	Color	1080P/1080i	60 fps	1920x1080	1/2.9	2.9x2.9		C	No Memory
STC-HD213DVN-B								C	
STC-HD213DVN-CS								CS	
STC-HD213SDI	Color	1080P/1080i	60 fps	1920x080	1/2.9	2.9x2.9	IMX291	C	With Memory
STC-HD213SDI-CS								CS	
STC-HD213SDIN	Color	1080P/1080i	60 fps	1920x1080	1/2.9	2.9x2.9		C	No Memory
STC-HD213SDIN-B								C	
STC-HD213SDIN-CS								CS	

Type	Model	Applicable Model	General Specifications
Mount Conversion Adapter	CS-C-R	CS Mount Series	—
Remote Control Unit	JIG-HD133-R	HDMI/DVI/SDI	Ø3.5 stereo pin jack

Type	Model	Description	
Cables	CAB-HDMI-015	4K HDMI Cable; 1.5m	
	CAB-HDMI-02	4K HDMI Cable; 2m	
	CAB-HDMI-03	4K HDMI Cable; 3m	
	CAB-HDMI-05	4K HDMI Cable; 5m	
	CAB-HDMI-100-OPT	4K HDMI Cable; 100m; Power	
	CAB-HDMI-10-OPT	4K HDMI Cable; 10m; Power	
	CAB-HDMI-20-OPT	4K HDMI Cable; 20m; Power	
	CAB-HDMI-30-OPT	4K HDMI Cable; 30m; Power	
	CAB-HDMI-50-OPT	4K HDMI Cable; 50m; Power	
	CAB-HDMI-70-OPT	4K HDMI Cable; 70m; Power	
Power	PWR-DC12-500R-A	Int/Dom Version of DC12	

Note: Tables include representative part numbers. Please consult the product page for more details.

M Series USB3 Vision Cameras

- USB3.0 Compact CMOS Camera
- Offered in resolutions ranging from 0.4M to 20.4M
- Plug and Play functionality
- Compatible with Omron AutoVISION & VisionScape.

🌐 Product Page

Global shutter models

Monochrome/Color	Resolution	Frame Rate	Effective Pixels (H × V)	Sensor Size	Cell Size (μm)	Sensor	Lens Mount	Model
Monochrome	0.4M	527.1 fps	720 × 540	1/2.9	6.9 × 6.9	IMX287	C	STC-MBS43U3V
Color								STC-MCS43U3V
Monochrome	1.3M	60 fps	1280 × 1024	1/1.8	5.3 × 5.3	EV76C560	CS	STC-MBE132U3V
Color								STC-MCE132U3V
Monochrome	1.6M	238 fps	1440 × 1080	1/2.9	3.45 × 3.45	IMX273	C	STC-MBS163U3V
Color								STC-MCS163U3V
Monochrome	2M	167 fps	2048 × 1088	2/3	5.5 × 5.5	CMV2000	C	STC-MBCM200U3V
Monochrome NIR								STC-MBCM200U3V-NIR
Monochrome	2.3M	41.6 fps	1920 × 1200	1/1.2	5.86 × 5.86	IMX249	C	STC-MBS231U3V
Color								STC-MCS231U3V
Monochrome	2.3M	163 fps	1920 × 1200	1/1.2	5.86 × 5.86	IMX174	C	STC-MBS241U3V
Color								STC-MCS241U3V
Monochrome	3.2M	56 fps	2048 × 1536	1/1.8	3.45 × 3.45	IMX265	C	STC-MBS312U3V
Color								STC-MCS312U3V
Monochrome	3.2M	121 fps	2048 × 1536	1/1.8	3.45 × 3.45	IMX252	C	STC-MBS322U3V
Color								STC-MCS322U3V
Monochrome	4M	89 fps	2048 × 2048	1	5.5 × 5.5	CMV4000	C	STC-MBCM401U3V
Color								STC-MCCM401U3V
Monochrome NIR								STC-MBCM401U3V-NIR
Monochrome	5M	35.8 fps	2448 × 2048	2/3	3.45 × 3.45	IMX264	C	STC-MBS500U3V
Color								STC-MCS500U3V
Monochrome	5M	75.7 fps	2448 × 2048	2/3	3.45 × 3.45	IMX250	C	STC-MBS510U3V
Color								STC-MCS510U3V
Monochrome	7.1M	51.2 fps	3216 × 2208	1.1	4.5 × 4.5	IMX428	C	STC-MBS70BU3V
Color								STC-MCS70BU3V
Monochrome	8.9M	32.5 fps	4096 × 2160	1	3.45 × 3.45	IMX267	C	STC-MBS881U3V
Color								STC-MCS881U3V
Monochrome	8.9M	41.9 fps	4096 × 2160	1	3.45 × 3.45	IMX255	C	STC-MBS891U3V
Color								STC-MCS891U3V
Monochrome	12.3M	23.5 fps	4096 × 3000	1.1	3.45 × 3.45	IMX304	C	STC-MBS122BU3V
Color								STC-MCS122BU3V
Monochrome	12.3M	30.4 fps	4096 × 3000	1.1	3.45 × 3.45	IMX253	C	STC-MBS123BU3V
Color								STC-MCS123BU3V

Note. We recommend that you use an external power supply for 8.9M and 12M cameras, for depending on PC performance, power supplied via USB bus connection alone may not be sufficient for these cameras.

Note. Models with "-SE" have been additionally equipped with the Short Exposure Mode feature.

Rolling shutter models

Monochrome/Color	Resolution	Frame Rate	Effective Pixels (H × V)	Sensor Size	Cell Size (μm)	Sensor	Lens Mount	Model
Monochrome	12M	31.2 fps	4000 × 3000	1/1.7	1.85 × 1.85	IMX226	C	STC-MBS1242U3V
Color								STC-MCS1242U3V
Monochrome	20.4M	18.5 fps	5472 × 3648	1	2.4 × 2.4	IMX183	C	STC-MBS2041U3V
Color								STC-MCS2041U3V

Non-USB3 Vision Compliant Models (with Rolling Shutters)

Monochrome/Color	Resolution	Frame Rate	Effective Pixels (H × V)	Sensor Size	Cell Size (μm)	Sensor	Lens Mount	Model
Monochrome	5M	14 fps	2592 × 1944	1/2.5	2.2 × 2.2	MT9P031	CS	STC-MBA5MUSB3
Color								STC-MCA5MUSB3

Factory Drive Recorder

The Omron Factory Drive Recorder offers users the ability to optimize their machine troubleshooting and minimize the time it takes to solve problems in the field through the combination of Omron Industrial Cameras and the easiest to use Event Capture Software on the market.

🌐 Product Page

- Record the Moment
  - Record up to 5 minutes of video before an event trigger and 5 minutes of video after an even trigger
- 4 Trigger Options
  - Master Image Comparison
  - Motion Trigger
  - Time Trigger
  - Trigger Signal (via Hardware Trigger)

- Live Monitoring & Manual Viewing
- Connect up to 8 Omron Industrial Cameras to the Software allowing for multiple camera recordings.
- High Speed & High Quality Recording
  - Omron Industrial Cameras feature Frame Rates up to 527 FPS & Resolutions up to 20 MP

Part Number	Description
STC-FDRSW-01	Omron's New Event Capture Software; Factory Drive Recorder

Related Products

Model No.	Product Family	Description
Industrial Camera	M Series GigE Vision Cameras	GigE Vision Industrial Cameras – Area Scan Cased
	M Series USB3 Vision Cameras	USB3 Vision Industrial Cameras – Area Scan Cased
	B Series GigE Vision Cameras	GigE Vision Industrial Cameras – Area Scan Board
	UVC Cameras	UVC Industrial Cameras – Multiple Configurations
	R Series USB3 Vision Remote Head	USB3 Vision Remote Head

Note: Tables include representative part numbers. Bold models: Preferred Availability. Please consult the product page for more details.

G9SP - Safety Controller

- The standalone safety controller for small and mid-sized applications.
- Communication with standard PLC via Ethernet or Serial
- Direct communication with HMI NB Series via Serial
- Four types of standard expansion

🌐 Product Page

Product	Inputs	Test outputs	Safety outputs	Common outputs	Model
G9SP Series	10	4	Transistor Output: 4	4	G9SP-N10S
	10	6		-	G9SP-N10D
	20	6	Transistor Output: 8	-	G9SP-N20S

Expansion Modules and Accessories

Description	No. of Outputs	No. of Inputs	Model
Expansion Modules	8 (NPN)	12 (NPN)	CP1W-20EDT
	8 (PNP)	12 (PNP)	CP1W-20EDT1
	32 (NPN)		CP1W-32ET
	32 (PNP)		CP1W-32ET1
Connection Cable	80cm (for connecting distant units)		CP1W-CN811
Communication Modules	RS-232 Serial		CP1W-CIF01
	EtherNet/FINS		CP1W-CIF41
	EtherNet/IP		CM-EIP-1
Programming software	1 license		WS02-G9SP01-V1
Cassette Memory			CP1W-ME05M

Note: Tables include representative part numbers. Bold models: Preferred Availability. Please consult the product page for more details.

NX-SL5 - Safety Controller

- A versatile safety controller, with EtherCAT and EtherNet/IP capabilities, for integrated or stand-alone solutions, making machine safety design, installation, and maintenance easier
- Enable flexible manufacture by supporting different safety networks,CIP Safety and FSoE. Enable a hybrid system, when combining the NX-SL5 with the NX-102.
- Sysmac Studio offers a set of unique functions to make functional safety management easier as Safety Signature Check and Online Function Verification. In addition, reduce the design cycle with automatic programming and simple automatic test.

🌐 Product Page   📹 Product Video

Product	Description	Model
NX-SL5 Safety Controller Units	Safety PLC, up to 1024 safety I/O and 128 safety connections	NX-SL5500
	Safety PLC, up to 2032 safety I/O and 254 safety connections	NX-SL5700

Product	Type	Protocol	Am. of Ports	Number of Networks	Safety Inputs	Safety Outputs	Test Outputs	Model
Communication & Remote Safety I/O Units	Network Coupler	EtherNet/IP	3	2				NX-CSG320
	Remote Module of safety I/Os	EtherNet/IP	2	1	12	4	12	GI-SMD1624
					12	-	12	GI-SID1224

Product	Type	No. of Points	Description	Model
Safety Input & Output Units	Input	4	4 safety input points (PNP) with 2 test outputs	NX-SIH400 Ver 1.1
		8	8 safety input points (PNP) with 2 test outputs	NX-SID800
	Output	2	2 safety outputs (PNP)	NX-SOH200
		4	4 safety outputs (PNP)	NX-SOD400

Note: Tables include representative part numbers. Please consult the product page for more details.

NX-SL3 - Safety Controller

- Effortless integration into the most common PLC's platforms in the market, providing reliable safety solutions while supporting different configurations.
- Offer a direct connection to any PLC using an EtherNet/ IP coupler, and build a stand-alone system. For larger projects, with a higher number of safety devices distributed over a larger area, using an EtherCAT coupler supports EtherCAT and FSoE.
- Sysmac Studio offers a set of unique functions to make functional safety management easier as Safety Signature Check and Online Function Verification. In addition, reduce the design cycle with automatic programming and simple automatic test.

🌐 Product Page

Product	Type	Model
NX-SL3 Safety Controller Units	Safety PLC, up to 256 safety I/O and 32 safety connections *	NX-SL3300 Ver 1.1
	Safety PLC, up 1024 safety I/O and 128 safety connections *	NX-SL3500 Ver 1.1

* Only FSoE master connections supported

Product	Type	No. of Points	Description	Model
Safety Input & Output Units	Input	4	4 safety input points (PNP) with 2 test outputs	NX-SIH400 Ver 1.1
		8	8 safety input points (PNP) with 2 test outputs	NX-SID800
	Output	2	2 safety outputs (PNP)	NX-SOH200
		4	4 safety outputs (PNP)	NX-SOD400

Product	Communication Cycle	Protocol	Maximum number of NX I/O modules	Maximum Current I/O	Model
Network Couplers	250 to 4,000 us	EtherCAT Slave	63	4A	NX-ECC201
				10A	NX-ECC202
	125 to 10,000 us				NX-ECC203
	4 to 1,000 us	EtherNet/IP Slave			NX-EIC202

Note: Tables include representative part numbers. Please consult the product page for more details.

F3SG-SR - Machine Guard Safety Light Curtain

- Three-color Area Beam Indicators (ABIs) enable easy alignment and quick troubleshooting
- Up to 30m protection range (25mm resolution and up)
- IO-Link communication capability helps improve preventive maintenance programs
- Advanced programming features (muting, blanking, pre-reset, warning zone, etc.) are available on all models.
- IP67G rating is standard, with IP69K option available (F3SG-SRB only)

🌐 Product Page   🎥 Product Video

Resolution	Protective Height (mm)	Area Beam Indicators	Part Number
14 mm	160	No	F3SG-4SRB0160-14
	320		F3SG-4SRB0320-14
	400		F3SG-4SRB0400-14
	480		F3SG-4SRB0480-14
	560		**F3SG-4SRB0560-14**
	640		F3SG-4SRB0640-14
	720		F3SG-4SRB0720-14-F
	1200		**F3SG-4SRB1200-14**
25 mm	360		F3SG-4SRB0360-25-F
	440		F3SG-4SRB0440-25-F
	600		**F3SG-4SRB0600-25-F**
	680		F3SG-4SRB0680-25-F
	760		F3SG-4SRB0760-25-F
	840		F3SG-4SRB0840-25-F
	920		**F3SG-4SRB0920-25-F**
	1000		F3SG-4SRB1000-25-F
	1200		**F3SG-4SRB1200-25**
	1440		F3SG-4SRB1440-25
	1520		**F3SG-4SRB1520-25**
	1600		F3SG-4SRB1600-25
	1840		F3SG-4SRB1840-25
14 mm	400	Yes	F3SG-4SRA0400-14
	560		**F3SG-4SRA0560-14**
	720		F3SG-4SRA0720-14-F
	880		F3SG-4SRA0880-14-F
	1200		**F3SG-4SRA1200-14**
25 mm	280		F3SG-4SRA0280-25-F
	440		F3SG-4SRA0440-25-F
	600		**F3SG-4SRA0600-25-F**
	760		F3SG-4SRA0760-25-F
	920		**F3SG-4SRA0920-25-F**
	1200		**F3SG-4SRA1200-25**
	1600		F3SG-4SRA1600-25
	1760		F3SG-4SRA1760-25

F3SG-PG - Perimeter Guard Safety Light Curtain

- Three-color Area Beam Indicators (ABIs) enable easy alignment and quick troubleshooting.
- Protection distance up to 110m
- Robust design for harsh environments (rated IP67G)
- IO-Link communication for remote monitoring

🌐 Product Page

Number of Beams	Beam Gap (mm)	Product Length (mm)	Protection Range (m)	Type	Part Number
2	500	670	up to 30m	Emitter/Receiver	F3SG-4PGA0670-2A
	500	670	up to 8m	Transceiver	F3SG-4PGA0670-2C
	500	670	up to 110m	Emitter/Receiver	F3SG-4PGA0670-2L
3	400	970	up to 30m	Emitter/Receiver	F3SG-4PGA0970-3A
	400	970	up to 110m	Emitter/Receiver	**F3SG-4PGA0970-3L**
4	300	1070	up to 30m	Emitter/Receiver	F3SG-4PGA1070-4A
	300	1070	up to 8m	Transceiver	F3SG-4PGA1070-4C
	300	1070	up to 110m	Emitter/Receiver	F3SG-4PGA1070-4L
	400	1370	up to 30m	Emitter/Receiver	F3SG-4PGA1370-4A
	400	1370	up to 8m	Transceiver	F3SG-4PGA1370-4C
	400	1370	up to 110m	Emitter/Receiver	**F3SG-4PGA1370-4L**

Note: Tables include representative part numbers. Please consult the product page for more details.

Safety Light Curtain Accessories and Cables

F3SG-SR/PG Brackets

Description	Part Number
Standard Bracket (non-adjustable)	F39-LSGF
Adjustable Side-Mount Bracket	F39-LSGA
Adjustable Top/Bottom Bracket (F3SJ, F3SN Adaptor)	F39-LSGTB-SJ
Adjustable Top/Bottom Bracket (F3SG-RA/RE Adaptor)	F39-LSGTB-RE
Adjustable Top/Bottom Bracket (MS4800, F3SR Adaptor)	F39-LSGTB-MS

F3SG-SR/PG Root Cables (plug into light curtain)

Description	Length	Emitter Part Number	Receiver Part Number
Root Cable to M12 connector (Standard)	0.3 m	F39-JGR3K-L	F39-JGR3K-D
Root Cable to Flying Leads	3m	F39-JG3C-L	F39-JG3C-D
Root Cable to Flying Leads	7m	F39-JG7C-L	F39-JG7C-D
Root Cable to Flying Leads	10m	F39-JG10C-L	F39-JG10C-D
Root Cable to M12 Connector (F3SJ-B/A, F3SR, or F3SN Conversion)	0.3 m	F39-JGR3K-SJ-L	F39-JGR3K-SJ-D
Root Cable to M12 Connector (F3SG-RE Conversion)	0.3 m	F39-JGR3K-RE-L	F39-JGR3K-RE-D
Root Cable to M12 Connector (MS4800 Conversion)	0.3 m	F39-JGR3K-MS-L	F39-JGR3K-MS-D

F3SG-SR/PG Extension Cables (plug into M12 Root Cable)

Description	Length	Emitter Part Number	Receiver Part Number
M12 to Flying Lead Extension Cable	3 m	F39-JG3A-L	F39-JG3A-D
M12 to Flying Lead Extension Cable	10 m	F39-JG10A-L	F39-JG10A-D
M12 to M12 Extension Cable	3 m	F39-JG3B-L	F39-JG3B-D
M12 to M12 Extension Cable	10 m	F39-JG10B-L	F39-JG10B-D
M12 to M12 Extension Cable	20 m	F39-JG20B-L	F39-JG20B-D

Note: Tables include representative part numbers. Please consult the product page for more details.

Safety Light Curtain Accessories and Cables

F3SG-SR Cascade Cables

Description	Length	Part Number
Side-by-Side Cascading Cable (2 cables per part number)	0.12 m	F39-JGR12L
Extension Cable for Cascading (2 cables per part number)	0.3 m	F39-JGR3W

F3SG-SR/PG IO-Link Cables

Description	Length	Part Number
NX-ILM400 IO-Link Cable	2 m	XS5F-D521-DJ0-IL
GX-ILM08C IO-Link Cable	3 m	F39-JG3B-L
GX-ILM08C IO-Link Cable	10 m	F39-JG10B-L
GX-ILM08C IO-Link Cable	20 m	F39-JG20B-L

F3SG-SR/PG Wiring Reduction and Reset Cables

Description	Length	Part Number
Y-Joint Plug/Socket Connector	0.5 m	F39-GCNY2
Reset Switch Connector	0.5 m	F39-GCNY3
Reset Switch Connector to Reset Switch Cable	1 m	X5SF-D421-C80-F
Reset Switch Connector to Reset Switch Cable	2 m	X5SF-D421-D80-F
Reset Switch Connector to Reset Switch Cable	3 m	X5SF-D421-E80-F
Reset Switch Connector to Reset Switch Cable	5 m	X5SF-D421-G80-F
Reset Switch Connector to Reset Switch Cable	10 m	X5SF-D421-J80-F
Reset Switch Connector to Reset Switch Cable	20 m	X5SF-D421-L80-F

Note: Tables include representative part numbers. Please consult the product page for more details.

F3SG-SR/PG Accessories

F3SG-SR, F3SG-PG, and F3SG-R[] Floor Mount Columns

Applicable F3SG-SR/F3SG-R[] Light Curtain	Applicable F3SG-PG Light Curtain	Column Height	Part Number
Protective Height up to 880 mm	F3SG-4PGA0670-2[]	990 mm	F39-ST0990
Protective Height up to 1280 mm	F3SG-4PGA0970-3A/3L F3SG-4PGA1070-4[]	1310 mm	F39-ST1310
Protective Height up to 1520 mm	F3SG-4PGA1370-4[]	1630 mm	F39-ST1630
Protective Height up to 1840 mm	-------------	1950 mm	F39-ST1950
Protective Height up to 2080 mm	-------------	2270 mm	F39-ST2270

F3SG-SR, F3SG-PG, and F3SG-R[] Mirror Columns

Applicable F3SG-SR/F3SG-R[] Light Curtain	Applicable F3SG-PG Light Curtain	Column Height	Part Number
Protective Height up to 880 mm	F3SG-4PGA0670-2[]	990 mm	F39-SML0990
Protective Height up to 1200 mm	F3SG-4PGA0970-3A/3L F3SG-4PGA1070-4[]	1310 mm	F39-SML1310
Protective Height up to 1520 mm	F3SG-4PGA1370-4[]	1630 mm	F39-SML1630
Protective Height up to 1840 mm	-------------	1950 mm	F39-SML1950
-------------	F3SG-4PGA0670-2A/2L	990 mm	F39-PML0990-2
-------------	F3SG-4PGA0970-3A/3L	1310 mm	F39-PML1310-3
-------------	F3SG-4PGA1070-4A/4L	1310 mm	F39-PML1310-4
-------------	F3SG-4PGA1370-4A/4L	1950 mm	F39-PML1630-4

Stand and Mirror Base Accessory

Description	Part Number
Adjustable and Rotatable Column Base	**F39-STB**

F3SG-SR and F3SG-PG Muting Accessories

Description	Length	Part Number
Through Beam Muting Sensor Mounting Arm	150 mm	F39-FMA150T
Through Beam Muting Sensor Mounting Arm	400 mm	F39-FMA400T
Retro-Reflective Muting Sensor Mounting Arm	150 mm	F39-FMA150R
Retro-Reflective Muting Sensor Mounting Arm	400 mm	F39-FMA400R
Muting Arm Bracket for F3SG-SR/PG Mounting	n/a	F39-LMAF1
Muting Sensor Connection Box	n/a	F39-GCN5

Note: Tables include representative part numbers. Please consult the product page for more details.

F3SG-RE - Economic Model

- Simple on/off functionality with easy wiring
- 5ms response time
- IP67 Rated
- Resolutions of 14 and 30mm

🌐 Product Page

Resolution	Protective Height (mm)	Part Number
14 mm	160	F3SG-4RE0160P14
	240	F3SG-4RE0240P14
	320	F3SG-4RE0320P14
	560	F3SG-4RE0560P14
	640	F3SG-4RE0640P14
	960	F3SG-4RE0960P14
	1200	F3SG-4RE1200P14
30 mm	350	F3SG-4RE0350P30
	430	F3SG-4RE0430P30
	590	F3SG-4RE0590P30
	750	F3SG-4RE0750P30
	910	F3SG-4RE0910P30
	1070	F3SG-4RE1070P30
	1230	F3SG-4RE1230P30
	1550	F3SG-4RE1550P30

Cables

Material	Length	Model
PVC Cable	2m	XS2F-M12PVC4S2M
	5m	XS2F-M12PVC4S5M
	10m	XS2F-M12PVC4S10M
PUR Cable	2m	XS2F-M12PUR4S2M
	5m	XS2F-M12PUR4S5M
	10m	XS2F-M12PUR4S10M
Connection cable in 'Y" between Sender and Receiver	0.5m	F39-GCNY1

Accessories (for Advanced and Economic models)

Type	Description	Model
Fixed Mounting Bracket (Already included)	Side fixation (2 supports per code)	F39-LGF
		F39-LGA
Adjustable Mounting Bracket (Optional)	Top fixation (4 supports per code)	F39-LGTB
		F39-LGTB-1

Note: Tables include representative part numbers. Please consult the product page for more details.

OS32C - Safety Laser Scanner

- 4m maximum safety zone and 15m warning zone
- Up to 70 different detection zones configurations
- Distance measurement capabilities up to 50m
- 5W power consumption

🌐 Product Page

Cable Outlet	Safety Range	Ethernet/IP Data	Part Number
Back	3m	No	OS32C-BP
	4m	No	OS32C-BP-4M
	3m	Yes	OS32C-BP-DM
	4m	Yes	OS32C-BP-DM-4M
Side	3m	No	OS32C-SP1
	4m	No	OS32C-SP1-4M
	3m	Yes	OS32C-SP1-DM
	4m	Yes	OS32C-SP1-DM-4M

OS32C Safety Laser Scanner Cables

Description	Length	Part Number
Power Cable	3 m	OS32C-CBL-03M
	10 m	OS32C-CBL-10M
	20 m	OS32C-CBL-20M
	30 m	OS32C-CBL-30M
Ethernet Cable	2 m	OS32C-ECBL-02M
	5 m	OS32C-ECBL-05M
	15 m	OS32C-ECBL-15M

OS32C Safety Laser Scanner Brackets

Description	Part Number
Bottom/Side Mounting Bracket	OS32C-BKT1
XY Axis Rotation Mouting Bracket	OS32C-BKT2
Simple Mounting Bracket	OS32C-BKT3
Protective Cover for Window	OS32C-BKT4
Mounting Stand	OS32C-MT
Hardware kit for Mounting Stand	OS32C-HDT

OS32C Spare/Replacement Parts

Description	Part Number
Scan Window	OS32C-WIN-KT
Sensor block without I/O 3m Range	OS32C-SN
Sensor block without I/O 4m Range	OS32C-SN-4M
Sensor block without I/O 3m Range, Ethernet/IP	OS32C-SN-DM
Sensor block without I/O 4m Range, Ethernet/IP	OS32C-SN-DM-4M
I/O Block with Back Cable Access	OS32C-CBBP
I/O Block with Side Cable Access	OS32C-CBSP1

Note: Tables include representative part numbers. Please consult the product page for more details.

G9SE - Safety Relays

- A compact safety relay for simple safety applications, with screwless terminals and increased diagnostic capabilities for fast troubleshooting and easy wiring
- Modules with two or four safety contacts and OFF-delay timing options
- Compact units, 17.5 or 22.5 mm wide
- Front side wiring using screw less terminals and led indicators for fast diagnostic

🌐 Product Page

Safety Outputs	Auxiliary Output	OFF-delay Max. time	Power	Model
2		-		G9SE-201
4	1	-	24VDC	G9SE-401
2		5 s		G9SE-221-T05
2		30 s		G9SE-221-T30

G9SA - Expandable Safety Relay

- All-purpose expandable safety relays series ideal for high demand applications.
- Ideal for high demand applications.
- Expandable outputs options only, up to 8: instantaneous or time-delay
- Simple expansion connection available

🌐 Product Page

Safety Outputs	Auxiliary Outputs	Power	Model
3	1		G9SA-301 AC/DC24
5	1	24VDC	G9SA-501 AC/DC24
3	1		G9SA-EX301
3	1		G9SA-TH301 AC/DC24*

* Two hand controller (type III C, EN 574)

Note: Tables include representative part numbers. Please consult the product page for more details.

G9SX - Safety Modules

- A versatile safety relay series, ideal for scalable safety solution, support logical "AND" functions for expansion and offer special modules for dedicated safety functions
- G9SX-family modules can be connected by a logical "AND" function to implement partial/global stopping of a machine
- Solid-state outputs, detailed LED diagnosis and clever feedback signals help to keep maintenance easy
- Expansion units with safe timing functions complete the line-up

🌐 Product Page

Terminal Block Type	Safety Output Instantaneous	Safety Output – Off-Delayed	Safety Standstill detection output	Safety slow-speed/ stopping detection output	Auxiliary Outputs	Power	Model
Screw Terminal	2	0	0	0	2	24VDC	G9SX-BC202-RT DC24
Spring-cage terminals	3	2	0	0	2		G9SX-AD322-T15-RC DC24*
Screw Terminals	0	0	3	0	2		G9SX-SM032-RT
Screw Terminals	2	0	0	2	4		G9SX-LM224-F10-RT **
Screw Terminals	2	0	0	0	2		G9SX-NS202-RT DC24 ***
Screw Terminals	2	2	0	0	2		G9SX-NSA222-T03-RT DC24

*Off-Delay:

T15: 0/0.2/0.3/0.4/0.5/0.6/0.7/1/1.5/2/3/4/5/7/10/15 s

T03: 0/0.2/0.3/0.4/0.5/0.6/0.7/0.8/0.9/1.0/1.2/1.4/1.8/2.0/2.5/3.0 s

** Safe Standstill monitoring unit based on Back EMF operation for two and three phase systems.

*** Limited speed monitoring unit

Note: Tables include representative part numbers. Please consult the product page for more details.

D41D - High-Coded Non-Contact Safety Door Switch

- Type 4 High-coded door switch, RFID
- Easy and quick automatic paring with Individual coding, single or multiple teaching type
- Three sizes of actuator, including flat and miniature to fit in narrow spaces or inside corners
- Symmetrical design for left and right mounting
- Approach direction can be either from the front or side
- Extensive diagnostic via a three-color LED indicators and diagnostic output
- Up to 31 safety door switches from D41 Series can be connected

🌐 Product Page

Sensor	Part Number	Coding Level	Connector
Sensor	D41D-1CD-N1	High, Individual coding	M8 connector
	D41D-2CD-025N2	High, Individual coding with no limitation	M12 with 250 mm cable
	Part Number	Type	Dimensions
Actuator[1]	D41D-A1	Standard	W x D x H= 39 x 29.5 x 18 (mm)
	D41D-A2	Flat	W x D x H= 60 x 16 x 6.8 (mm)
	D41D-A3	Miniature	W x D x H= 22 x 9 x 7 (mm)

1. Actuators sold separately

Accessories

	Part Number	Description
Cables	D41D-8P5-CFM8-702M	Cable, 2m, M8 connector, IP67
	D41D-8P5-CFM8-705M	Cable, 5m, M8 connector , IP67
	D41D-8P5-CFM8-710M	Cable, 10m, M8 connector , IP67
	D41L-8P5-CFM12-905M	Cable, 5m, M12 connector, IP69
	D41L-8P5-CFM12-910M	Cable, 10m, M8 connector, IP69
Sealing Kits	D41D-SK	Seal mounting holes. Contains: 4 flat plugs and 4 plugs with rim for high screw head
Mounting Kits	D41D-MS	Contains: 2 mounting plates and 4 ferrule plugs

Note: Tables include representative part numbers. Please consult the product page for more details.

D41L - Type 4 High-Coded Guard Lock Switch

- Type 4 High-coded door switch, RFID
- Easy and quick automatic paring with Individual coding, single or multiple teaching type
- Improved hygiene: resistant to wide range of cleaning agents, easy to clean
- Protection class IP66, IP67 and IP69 and ECOLAB certified
- Large actuator tolerances and easy latching force adjustment
- Power to lock or power to unlock versions with optional emergency exit
- 3 actuating directions with identical mounting for left and right hinged doors

🌐 Product Page

- 3 LED indicators for smart diagnostics
- Star handle instead of key hole to prevent water and foreign material to collect
- Device can be used as an end stop for sliding door applications
- Up to 31 devices connected in series

	Part Number	Lock and Release	Teaching	OSSD Configuration	Connection Method
	D41L-1YDG-N2	Power to lock (solenoid lock)	Individual coding, single teaching	Guard monitoring and lock monitoring	No
	D41L-2YDG-N2		Individual coding, multiple teaching	Only guard monitoring	
	D41L-2ZDGE-N2				Yes
	D41L-1ZDA-N2	Power to unlock (mechanical release)	Individual coding, single teaching		No
	D41L-2YDA-N2		Individual coding, multiple teaching	Guard monitoring and lock monitoring	
	D41L-2YDAE-N2				Yes

	Part Number	Description
Actuator[1]	D41L-A1	Compatible with D41L models

1. Actuators sold separately

Accessories

	Part Number	Description
Cables	D41L-8P5-CFM12-905M	Cable, 5m, M12 connector, IP69
	D41L-8P5-CFM12-910M	Cable, 10m, M8 connector, IP69
Mounting Plate	D41L-MP	Mounting plate for sensor only
Mounting Set	D41L-MS	Mounting set for actuator only

Note: Tables include representative part numbers. Please consult the product page for more details.

D41G - Type 4 High-Coded Guard Lock Switch

- Type 4 High-coded door switch, RFID
- Easy and quick automatic pairing with individual coding, single or multiple teaching type
- Power to lock and power to unlock versions available
- OSSD configuration for guard monitoring only or guard and lock monitoring
- Extensive diagnostic via a three-color LED indicators and diagnostic output
- Easily mounted to standard aluminum profile systems
- Up to 31 devices connected in series

🌐 Product Page

	Part Number	Lock and Release	Teaching	OSSD Configuration	Connection Method
Sensor[1]	D41G-1YDA-N2	Power to unlock	Individual coding, single teaching	Guard monitoring and lock monitoring	M12 connector
	D41G-2YDA-N2	Power to unlock	Individual coding, multiple teaching		
	D41G-2YDG-N2	Power to lock			
	D41G-2YDG-N2	Power to lock			
	D41G-2YDG-T1	Power to lock			Screw Terminal
	D41G-2ZDA-T1	Power to unlock		Only guard monitoring	

1. Actuators sold separately

Accessories

	Part Number	Description
Cables	D41L-8P5-CFM12-905M	Cable, 5m, M12 connector, IP69
	D41L-8P5-CFM12-910M	Cable, 10m, M8 connector, IP69

Note: Tables include representative part numbers. Please consult the product page for more details.

D41G Actuators

- Actuators for right and left hinged doors with door handle and optional emergency exit and lock-out tag as well as options available for sliding doors
- Actuators for right and left sliding doors

🌐 Product Page

Actuator Type[1]	Part Number	Handle Position	Emergency Exit Unit	Lock-out option
With door handle	D41G-A2L-E1	Left	Yes	-
	D41G-A2L-E1T		Yes	Yes
	D41G-A2R-E1	Right	Yes	-
	D41G-A2R-E1T		Yes	Yes
Non door handle	D41G-A1L	Left	–	–
	D41G-A1R	Right	–	–

1. Actuators sold separately

D40Z - Compact Non-Contact Door Switch

- Up 30 Switches can be connected to one Safety Controller while maintaining PLe/safety category 4
- Can be connected to G9SP or G9SX-NS[] Safety Controllers
- LED indication for easy troubleshooting
- Compact Non-contact Door Switch can be mounted from both sides

🌐 Product Page

Cable length	Auxiliary Outputs	Model
2 m	1	D40Z-1C2
5 m		D40Z-1C5

Note: Tables include representative part numbers. Bold models: Preferred Availability. Please consult the product page for more details.

D40P - Non-Contact Safety Switches

- Hall effect technology provides solid state outputs for increased longevity
- LED indicates operation state
- Operates with all OMRON safety controllers and safety relays
- Connect up to 20 switches in series, up to PLd acc. EN ISO 13849-1

🌐 Product Page

Body Size	Housing	Contacts	Cable Connection	Model
Elongated			M12, 8 pin, fitted with 250 mm cable	D40P-LPC-21-M12
Small	Polyester Housing	2NC / 1NO	M12, 8 pin, fitted with 250 mm cable	D40P-SPC-21-M12
Barrel			5 m pre-wired	D40P-BPC-21-05
Small	Stainless Steel		5 m pre-wired	D40P-SMC-21-05
Small	Hygienic	2NC / 1NO	M12, 8 pin, fitted with 250 mm cable	D40P-SHC-21-M12

Accessories

Type	Description	Model
Cables, M12 female - 8 pin to flying leads	5m	D40ML-CBL-M12-5M
Cables, M12 female - 8 pin to flying leads	10m	D40ML-CBL-M12-10M
T-Connector Connection Cable	T-Connector for M12 cable	D40P-8PTC-M12

D40ML - RFID Magnetic Locking Safety Switch

- Magnetic latching combines with RFID technology to deliver high holding force and tamper resistance
- Residual magnetism acts as light door latch after unlocking and it provides multiple holding forces
- Clean/Sanitize in Place – stainless steel versions are rated IP69K
- For use on machines with no rundown time if power is lost

🌐 Product Page

Actuator Type	Case Material	Holding Force	Cable Connection	Model
Basic	Diecast Metal (IP67)	1500N		D40ML-M1-B-M12
Basic	Plastic (IP67)	1500N	Pigtail w/ M12 Connector	D40ML-P1-B-M12
Basic	316 Stainless Steel (IP69K)	950N		D40ML-SS1-B-M12
Unique	316 Stainless Steel (IP69K)	600N	5m Cable	D40ML-SS2-U-5M

Accessories

Type	Description	Model
Cables, M12 female - 8 pin to flying leads	5m	D40ML-CBL-M12-5M
Cables, M12 female - 8 pin to flying leads	10m	D40ML-CBL-M12-10M

Note: Tables include representative part numbers. Bold models: Preferred Availability. Please consult the product page for more details.

D4SL-N - Guard Lock Safety Door Switch

- A wide variety of built-in switches can be used for various devices (4-, 5-, and 6-contact models are available)
- Removable terminal block for easy wiring and quick maintenance
- Key holding force of 1,300N
- Slide key available to prevent workers from becoming trapped inside the hazardous area
- Can be easily mounted on 40 × 40 mm aluminum frames

Product Page

Type	Conduit Size	Contact Model	Head Material	Door Lock and Release	Indicator	Model
D4SL-N	1/2-14NPT *	2NC/1NO + 2NC/1NO	Metal	Mechanical lock/24VDC solenoid release	Yes	D4SL-N3NDA-D
	1/2-14NPT *	2NC/1NO + 2NC/1NO	Metal	24VDC solenoid lock/mechanical release	Yes	D4SL-N3NDG-D
	M20	3NC + 1NC/1NO	Resin	Mechanical lock/24VDC solenoid release	Yes	D4SL-N4GFA-D
	G1/2	2NC/1NO + 2NC/1NO	Resin	Mechanical lock/24VDC solenoid release	Yes	D4SL-N2NFA-D4

* M20, includes M20-to-1/2-14NPT conversion adapter.

Slides Key for D4SL

- Lockout Key to prevent workers from becoming trapped inside the hazardous area
- The plastic material makes the Slide Key suitable for lightweight doors

Product Page

Description	Model
Slide Key Kit	D4SL-NSK10-LK
Slide Key with inner lever	D4SL-NSK10-LKH

Operation Keys for D4SL

Mounting Orientation	Special Function	Model
Horizontal	-	D4SL-NK1
Horizontal	Rubber cushions	D4SL-NK1G
Vertical	-	D4SL-NK2
Horizontal	Adjustable	D4SL-NK3

Note: Tables include representative part numbers. Please consult the product page for more details.

PMAC Motion Controllers CK3 Series
CK3E - EtherCAT Based Controllers

- 32, 16 or 8 axes motion control
- Up to 250 μs cycle time
- Compatible with standard G-Code functions
- Save space & wiring thanks to compact design
- CAD/CAM for easy motion control
- EtherCAT for flexible configuration

🌐 Product Page

Number of Axis	Memory capacity	Programming language	Model
8			CK3E-1210
16	1G	G-Code/ANSI C/original programming language	CK3E-1310
32			CK3E-1410

By combining global leading Delta Tau Data Systems' Motion Control technologies, Omron can open up new applications and solutions. The CK3E is a controller designed for precise multi-axis control. You can build a system capable of controlling up to 32 axes of motion and incorporate customized control algorithms into the system. The CK3E allows you to program in C language and reuse existing software assets. The compact design saves space in machines and control panels. EtherCAT® connects servo drives, I/O, and other devices to the CK3E, reducing the number of cables.

CK3M - Modular Controllers

- Local axes for nanoscale precision
- Ultra high-speed synchronous control (50μs/5 axes)
- Custom servo regulation algorithms
- Flexibility on using multi-vendor actuators and encoders
- Flexibility on programming on G-code, ANSI C or original programming language

🌐 Product Page

Product Type	Memory capacity	EtherCAT® port	EtherCAT Axes	Expansion	Model
CPU Units	RAM: 1 GB Built-In flash memory: 1 GB	-	-	One expansion rack can be connected using the expansion master unit and expansion slave unit	CK3M-CPU101
		EtherCATEtherCAT®: 1 port (DC sync)	4		CK3M-CPU111
			8		CK3M-CPU121
	RAM: 2 GB Built-in flash memory: 4 GB	EtherCATEtherCAT®: 1 port (DC sync)	16		CK5M-CPU131
			32		CK5M-CPU141

Maximize your machine's performance: Performing precise linear motor drive control and nanoscale positioning, the PMAC (Programmable Multi Axis Controller) has been appreciated by manufacturers of semiconductor manufacturing equipment and other leading-edge equipment. Omron now offers a next generation motion controller CK3M that packs PMAC's superior motion control capability, multi-vendor connectivity, and flexible development capability into its compact design. The CK3M removes constraints and barriers and maximizes your machine's capabilities.

Note: Tables include representative part numbers. Please consult the product page for more details.

Product Type	Amplifier interface	Encoder interface	Output type	Model
Axial Interface Units	DirectPWM output	Digital quadrature encoder/serial encoder	NPN type	CK3W-AX1313N
	DA output (Filtered PWM)			CK3W-AX1414N
	DA output (True DAC)			CK3W-AX1515N
	DirectPWM output	Sinusoidal encoder/Serial encoder		CK3W-AX2323N
	DirectPWM output	Digital quadrature encoder/serial encoder	PNP type	CK3W-AX1313P
	DA output (Filtered PWM)			CK3W-AX1414P
	DA output (True DAC)			CK3W-AX1515P
	DirectPWM output	Sinusoidal encoder/Serial encoder		CK3W-AX2323P

Product Type	Feedback interface	Output type	TCR Output	Model
Laser Interface Units	XY2-100	PWM output		CK3W-GC1100
			TCR Output	CK3W-GC1200
	SL2-100			CK3W-GC2100
			TCR Output	CK3W-GC2200

Product Type	Feedback interface	Feedback type	Number of channels	Model
Serial Encoder Interface Unit	Serial Encoder	BiSS-C, Endat2.2, and 1S Motor	4	CK3W-ECS300

Product Type	Description	Model
Power Supply Unit	Rated output voltage: 5 VDC / 24 VDC	CK3W-PD048

Product Type	Number of inputs	Number of outputs	I/O type	Model
Digital I/O Units	16 points	16 points	NPN	CK3W-MD7110
			PNP	CK3W-MD7120

Product Type	Input Range	Number of inputs	Model
Analog Input Units	Unit -10 to 10 V	4 points	CK3W-AD2100
		8 points	CK3W-AD3100

Product Type	Product Name	Function	Model
Expansion Master Unit and Expansion Slave Unit	Expansion Master Unit	Expansion Master Unit connects to the right side of the CPU Unit	CK3W-EXM01
	Expansion Slave Unit	Expansion Slave Unit connects to the right side of the Power Supply Unit	CK3W-EXS02
	Expansion cable	To connection between the Expansion Master Unit and Slave Unit (0.3m)	CK3W-CAX003A

Note: Tables include representative part numbers. Please consult the product page for more details.

CK3C -
Compact PMAC Controller

- ARM Dual Core 1GHz Processor
- Memory: 1GB RAM, 1GB Flash
- Local/direct amplifier interface as well as EtherCAT
- Multiple encoder interfaces available with ACC modules
- On Borad IO available with ACC modules
- EtherCAT for flexible configuration

Model	Analog I/O	Ethernet Port(s)	EtherCAT License	Extended Pin
CK3C-AX1100	No	1	No	No
CK3C-AX1100E	No	1	No	Yes
CK3C-AX1201	"4x 16-bit AI 1x Filtered PWM AO "	2	No	No
CK3C-AX1201E	"4x 16-bit AI 1x Filtered PWM AO "	2	No	Yes
CK3C-AX1211	"4x 16-bit AI 1x Filtered PWM AO "	2	I/O Only	No
CK3C-AX1211E	"4x 16-bit AI 1x Filtered PWM AO "	2	I/O Only	Yes
CK3C-AX1231	"4x 16-bit AI 1x Filtered PWM AO "	2	8 Servo	No
CK3C-AX1231E	"4x 16-bit AI 1x Filtered PWM AO "	2	8 Servo	Yes

Model		Analog I/O
ACC-24S3	3-4050000-000-000000	4-Channel expansion
	3-4050000-000-010000	4-Channel expansion with 4 analog inputs & 1 Filtered PWM output
ACC-51S	3-3674-0-0002-000000	2 channel 4096x interpolator board for sinusoidal encoders
	3-3674-0-0012-000000	4 channel 4096x interpolator board for sinusoidal encoders
ACC-84S	3-3936-0-0002-000000	4-Channel SSI serial encoder protocol
	3-3936-0-0003-000000	4-Channel ENDAT serial encoder protocol
	3-3936-0-0006-000000	4-Channel Yaskawa Sigma II & III serial encoder protocol
	3-3936-0-0008-000000	4-Channel Panasonic serial encoder protocol
	3-3936-0-000D-000000	4-Channel Mitsubishi serial encoder protocol
	3-3936-0-000E-000000	4-Channel 1S serial encoder protocol
	3-3936-0-0TBC-000000	4-Channel table based compare protocol
	3-3936-0-0XY2-000000	XY2-100 serial link for 2-axis and 3-axis laser scan heads and galvanometers
ACC-8AS	3A0-603673-10X	4-Channel dual 16-bit DAC analog board
ACC-8FS	3F0-603673-10X	4-Channel direct PWM breakout board
Breakout Board	CBB4-00-000-000-1000	CK3C breakout board with separate connectors for each encoder, each flag set, and servo amplifier output

Note: Tables include representative part numbers. Please consult the product page for more details.

Power PMAC IDE
(Integrated Development Environment)

• Based on Microsoft® Visual Studio®
• ANSI C or original programming language
• Easy tuning
• Simple setting
• Troubleshooting
• Debugger

Note: Tables include representative part numbers. Please consult the product page for more details.

1S Series - Servomotor

- Advanced design allows easy installation and wiring
- EtherCAT communications up to 125µsec
- Safety over the EtherCAT network
- Motor has 23-bit battery less absolute encoder
- 350% momentary torque (200 V, 750 W max.)

🌐 Product Page

RPM	Capacity	Torque	Motor	Drive	Motor	Drive
			100V VAC		480V VAC	
	0.05 kW	0.159 Nm	R88M-1M05030S-(1)S2	R88D-1SN01L-ECT		
	0.1 kW	0.318 Nm	R88M-1M10030S-(1)S2	R88D-1SN01L-ECT		
	0.2 kW	0.637 Nm	R88M-1M20030S-(1)S2	R88D-1SN02L-ECT		
	0.4 kW	1.27 Nm	R88M-1M40030S-(1)S2	R88D-1SN04L-ECT		
			200V VAC			
	0.05 kW	0.159 Nm	R88M-1M05030T-(1)S2	R88D-1SN01H-ECT		
	0.1 kW	0.318 Nm	R88M-1M10030T-(1)S2	R88D-1SN01H-ECT		
	0.2 kW	0.637 Nm	R88M-1M20030T-(1)S2	R88D-1SN02H-ECT		
3000 RPM	0.4 kW	1.27 Nm	R88M-1M40030T-(1)S2	R88D-1SN04H-ECT		
	0.75 kW	2.39 Nm	R88M-1M75030T-(1)S2	R88D-1SN08H-ECT	R88M-1L75030C-(1)S2	R88D-1SN10F-ECT
	1.0 kW	3.18 Nm	R88M-1L1K030T-(1)S2	R88D-1SN10H-ECT	R88M-1L1K030C-(1)S2	R88D-1SN10F-ECT
	1.5 kW	4.77 Nm	R88M-1L1K530T-(1)S2	R88D-1SN15H-ECT	R88M-1L1K530C-(1)S2	R88D-1SN15F-ECT
	2.0 kW	6.37 Nm	R88M-1L2K030T-(1)S2	R88D-1SN20H-ECT	R88M-1L2K030C-(1)S2	R88D-1SN20F-ECT
	3.0 kW	9.55 Nm	R88M-1L3K030T-(1)S2	R88D-1SN30H-ECT	R88M-1L3K030C-(1)S2	R88D-1SN30F-ECT
	4.0 kW	12.7 Nm	R88M-1L4K030T-(1)S2	R88D-1SN55H-ECT	R88M-1L4K030C-(1)S2	R88D-1SN55F-ECT
	4.7 kW	15.0 Nm	R88M-1L4K730T-(1)S2	R88D-1SN55H-ECT		
	5.0 kW	15.9 Nm			R88M-1L5K030C-(1)S2	R88D-1SN55F-ECT
	0.4 kW	1.91 Nm			R88M-1M40020C-(1)S2	R88D-1SN06F-ECT
	0.6 kW	2.86 Nm			R88M-1M60020C-(1)S2	R88D-1SN06F-ECT
2000 RPM	1.0 kW	4.77 Nm	R88M-1M1K020T-(1)S2	R88D-1SN10H-ECT	R88M-1M1K020C-(1)S2	R88D-1SN10F-ECT
	1.5 kW	7.16 Nm	R88M-1M1K520T-(1)S2	R88D-1SN15H-ECT	R88M-1M1K520C-(1)S2	R88D-1SN15F-ECT
	2.0 kW	9.55 Nm	R88M-1M2K020T-(1)S2	R88D-1SN20H-ECT	R88M-1M2K020C-(1)S2	R88D-1SN20F-ECT
	3.0 kW	14.3 Nm	R88M-1M3K020T-(1)S2	R88D-1SN30H-ECT	R88M-1M3K020C-(1)S2	R88D-1SN30F-ECT
	4 kW	25.5 Nm	R88M-1M4K015T-(1)S2	R88D-1SN55H-ECT	R88M-1M4K015C-(1)S2	R88D-1SN55F-ECT
	5.0 kW	31.8 Nm	R88M-1M5K015T-(1)S2	R88D-1SN55H-ECT		
1500 RPM	5.5 kW	35 Nm			R88M-1M5K515C-(1)S2	R88D-1SN55F-ECT
	7.5kW	47.8 Nm	R88M-1M7K515T-(1)S2	R88D-1SN75H-ECT	R88M-1M7K515C-(1)S2	R88D-1SN75F-ECT
	11 kW	70 Nm	R88M-1M11K015T-(1)S2	R88D-1SN150H-ECT	R88M-1M11K015C-(1)S2	R88D-1SN150F-ECT
	15 kW	95.5 Nm	R88M-1M15K015T-(1)S2	R88D-1SN150H-ECT	R88M-1M15K015C-(1)S2	R88D-1SN150F-ECT
1000 RPM	0.9 kW	8.59 Nm	R88M-1M90010T-(1)S2	R88D-1SN10H-ECT	R88M-1M90010C-(1)S2	R88D-1SN10F-ECT
	2.0 kW	19.1 Nm	R88M-1M2K010T-(1)S2	R88D-1SN20H-ECT	R88M-1M2K010C-(1)S2	R88D-1SN20F-ECT
	3.0 kW	28.7 Nm	R88M-1M3K010T-(1)S2	R88D-1SN30H-ECT	R88M-1M3K010C-(1)S2	R88D-1SN30F-ECT

Note: (1) **B** - Motor with brake WHITE - Without brake

Note: Tables include representative part numbers. Please consult the product page for more details.

1SA Series - Servomotor & Drive

- PLe/SIL3 safety functions
- STO, SS1, SS2, SOS, SLS, SLP, SDI, & SBC
- Drive with EtherCAT Communication
- Single cable design
- Right angle, rotatable, connector on motor
- Absolute encoder without the need for battery

🌐 Product Page

RPM	Capacity	Torque	Motor	Drive	Motor	Drive
			200V VAC		400V VAC	
3000 RPM	0.2 kW	0.637 Nm	R88M-1AM20030T-(1)S2	R88D-1SAN02H-ECT		
	0.4 kW	1.27 Nm	R88M-1AM40030T-(1)S2	R88D-1SAN04H-ECT		
	0.75 kW	2.39 Nm	R88M-1AM75030T-(1)S2	R88D-1SAN08H-ECT	R88M-1AL75030C-(1)S2	R88D-1SAN10F-ECT
	1.0 kW	3.18 Nm	R88M-1AL1K030T-(1)S2	R88D-1SAN10H-ECT	R88M-1AL1K030C-(1)S2	R88D-1SAN10F-ECT
	1.5 kW	4.77 Nm	R88M-1AL1K530T-(1)S2	R88D-1SAN15H-ECT	R88M-1AL1K530C-(1)S2	R88D-1SAN15F-ECT
	2.0 kW	6.37 Nm	R88M-1AL2K030T-(1)S2	R88D-1SAN20H-ECT	R88M-1AL2K030C-(1)S2	R88D-1SAN20F-ECT
	2.6 kW	8.28 Nm	R88M-1AL2K630T-(1)S2	R88D-1SAN30H-ECT		
	3.0 kW	9.55 Nm			R88M-1AL3K030C-(1)S2	R88D-1SAN30F-ECT
1500 RPM	1.5 kW	9.55 Nm	R88M-1AM1K515T-(1)S2	R88D-1SAN15H-ECT	R88M-1AM1K515C-(1)S2	R88D-1SAN15F-ECT
	2.7 kW	17.2 Nm	R88M-1AM2K715T-(1)S2	R88D-1SAN30H-ECT		
	3.0 kW	19.1 Nm			R88M-1AM3K015C-(1)S2	R88D-1SAN30F-ECT

Note: (1) **B** - Motor with brake WHITE - Without brake

Note: Tables include representative part numbers. Please consult the product page for more details.

LD Series – Autonomous Mobile Robots

- Simplified programming and navigation using digital mapping
- In compliance with safety standards ISO 12100, ISO 14121-2 and ISO 13849-1
- Rechargeable battery with autonomy of 12 to 15 hours and self-management for recharging
- Connectivity with factory management software (MES/WMS)
- Cleanroom and ESD options available

🌐 Product Page   📹 Product Video

Part Number Configurator   37□□2-□
                                      (1)(2)   (4)

No.	Item	Specification		Symbol
1	Robot Type	LD 60/LD 90		0
		LD 250		2
2	Speed & Payload	0.9m/s (Excludes LD 250)	90Kg (LD90)	6
		1.2m/s (LD 250 Only)	250Kg	2
		1.3m/s (Excludes LD 250)	90Kg (LD90)	4
		1.8 m/s/ (LD 60 Only)	60Kg	3
3	Configuration	Standard LD60 / LD 90 / LD 250	Robot	00000
			Robot, Dock	00002
			Robot, Dock, Joystick, Top Plate	10004
		ESD	Robot	20000
			Robot, Dock	20002
			Robot, Dock, Joystick, Top Plate	20004

Accessories[1]

Item	Description	Model
Battery[2]	Power battery	20452000
Fleet Manager	Primary Fleet Manager	20271-900
	Secondary Fleet Manager (Backup Unit)	20271-901
Fleet Simulator	Simulation of up to 10 AMRs	20271-903
FLOW iQ	Analytics and visualization of fleet operations (5yr)	20271-705
Cell Alignment Positioning System (CAPS)	Improved positioning of AMRs for high accuracy applications (Sold per AMR)	20271-805

1. Additional accessories available, contact your Omron Sales Representative for additional details

2. The battery 20452000 must be purchased separately

Note: Tables include representative part numbers. Please consult the product page for more details.

HD-1500 – Autonomous Mobile Robot

- Natural feature navigation: Automatically plans efficient routes and prevents collisions
- Fleet management: Operates in coordination with a fleet of up to 100 mobile robots
- Easy deployment: Installs quickly, without facility modifications
- 1500 Kg large capacity payload
- Dynamic intelligent 360° safety
- Integrated automation controller

🌐 Product Page   📹 Product Video

Part Number Configurator   37 ☐ ☐ ☐ – ☐
(1) (2) (3)   (4)

No.	Item	Specification		Symbol
1	Robot Type	HD-1500		4
2	Speed & Payload	1.8 m/s	1500 Kg	8
3	Laser Version	Omron (HD)		0
4	Configuration	Standard HD-1500	Robot	00000
			Robot, Dock	00002
			Robot, Side Lasers	00010
			Robot, Single HAPS	00100
			Robot, Single HAPS, Side Lasers	00110
			Robot, Double HAPS	00200
			Robot, Double HAPS, Side Lasers	00210
			Robot, Dock, Joystick/Pendant, Top Plate	10004
			Robot, Dock, Single HAPS, Joystick/Pendant, Top Plate	10104
			Robot, Dock, Single HAPS, Joystick/Pendant, Top Plate, Side Lasers	10114
			Robot, Dock, Double HAPS, Joystick/Pendant, Top Plate	10204
			Robot, Dock, Single HAPS, Joystick/Pendant, Top Plate, Side Lasers	10214

Accessories[1]

Item	Description	Model
Battery[2]	Power battery	68330000
Fleet Management	Primary Fleet Manager	20271-900
	Secondary Fleet Manager (Backup Unit)	20271-901
Fleet Simulator	Simulation of up to 10 AMRs	20271-903
FLOW iQ	Analytics and visualization of fleet operations (5yr)	20271-705
Cell Alignment Positioning System (CAPS)	Improved positioning of AMRs for high accuracy applications (Sold per AMR)	20271-805

1. Additional accessories available, contact your Omron Sales Representative for additional details
2. Vehicle Battery (68330000) must be purchased separately from the robot and is shipped separate from the HD Vehicle.

Note: Tables include representative part numbers. Please consult the product page for more details.

Omron TM - Collaborative Robots

- Designed to promote a safe and harmonious workplace between humans and machines.
- Easy-to-use graphical programming environment for quick startup and operation.
- Built-in vision-based robot control enables visual servoing, inspection, and measurement operations.
- TMvision and landmark allows truly flexible, fast changeover.

🌐 Product Page   📷 Product Video

Part Number Configurator

RT6- ☐ ☐ ☐ ☐ ☐ ☐ ☐
(1)   (2) (3) (4) (5) (6) (7) (8)

No.	Item	Specifications	Symbol
(1)		Omron TM Collaborative Robots	
(2)	Model Type	TM5	0
		TM12	1
		TM14	2
		TM16	3
		TM20	4
(3)	Power Supply	AC	0
		DC	1
(4)	Vision System	Integrated Camera	0
		No Camera (X Model)	1
(5)(6)	Arm Length	700	70
		900	90
		1100	11
		1300	13
(7)	Configuration	Standard	0
		Semi S2 Certification	1
		Standard with Ethernet/IP and PROFINET (Fieldbus)	2
		Food Grade Grease	3"
		Food Grade Grease with Ethernet/IP and PROFINET (Fieldbus)	4"
(8)	Cable Length	Standard Length (3m/1.5m)*	1
		Extended Length (12m)*	2

Note: 1.5m cable is only standard on DC models. 12m cable is not available on DC models.

Accessories[1]

Type	Notes	Model
Landmark	3D position referencing label (2 units included in the robot code)	RT6-A000021
Mobile Station	Compatible with OMRON TM5 only	RT6-A000010
Portable Pedestal	Compatible only with OMRON TM5/Adjustable Height	RT6-A000009
SSD Card with cable	128 GB of memory with SATA cable	RT6-A000012
Calibration kit	Required for TCP calibration and manual vision	RT6-A000002
Pneumatic Box	Recommended to attach to the robot pedestal	RT6-A000015

1. Additional accessories available, contact your Omron Sales Representative for additional details

Note: Tables include representative part numbers. Please consult the product page for more details.

TMFlow - Omron TM Collaborative Robot Software

- Intuitive, graphical programming enables users to create complex robot solutions without requiring extensive training or programming experience
- Built-in vision-based robot tasks including barcode scanning, pattern matching, and fiducial mark matching are simple to integrate into a project
- Landmarks can be used as reference points for the robot, allowing the robot to be flexibly relocated between workstations while minimizing changeover times
- The Plug & Play ecosystem of tools and peripherals can quickly and easily be configured within TMFlow

🌐 Product Page

Part Numbers

Product Name	Add-On Product Names	Remarks	Part Number	Add-On Part Numbers
USB Dongle	—	Required for all extra software licenses.	RT6-A000004	—
TMFlow	—	Software required to control the cobot. Free download.	—	—
	TM Identify & Measure	License, add-on to TMFlow. Includes: Identification of pose variation, specific color area size, subtract reference image, line/circle burr, counting and gauge.	—	RT6-S100000
	TM External Vision	License, add-on to TMFlow. Required when using eye-to-hand cameras.	—	RT6-S100002
	TM OCR	License, add-on to TMFlow. Includes: Text OCR and Number OCR	—	RT6-S100003
TMFlow Editor	—	License, provides a convenient way to open and edit project offline.	RT6-S200001	—
	TMFlow editor - Offline AOI	License, add-on to TMFlow Editor. Enables TMFlow Editor to offline edit a TMFlow project that includes AOI vision.	—	RT6-S100005

Note: Tables include representative part numbers. Please consult the product page for more details.

Hornet 565 - Parallel Robots (Standalone)

- High-speed operation tracks up to a conveyor speed of 1.4 m/s
- Designed with a high payload to support multi-hand (multi-picking)
- Supports fast Pick & Place on a fast conveyor
- Maximum working diameter 1,130 mm
- Maximum payload 8 kg
- Programmable through ACE software and eV+ language, or through the familiar IEC 61131-3 when using ePLC Connect

🌐 Product Page

Item	Number of Axes	IP		Maximum Payload	Working volume		
					X,Y axis (stroke)	Z axis (stroke)	theta axis (rotation angle)
Hornet 565	3 axes	Standard		8 kg	1130 mm	425 mm	-
		IP65/67					
	4 axes	Standard		3 kg			±360°
		IP65/67					

Note: Additional accessories available, contact your Omron Sales Representative for additional details

Part Number Configurator

1720-☐-456☐☐
(1) (2) (3)

No.	Item	Specification		Symbol
1	Bundle Type	Without Smart Controller EX	eV+	0
			ePLC	1
			Add-On	3
		With Smart Controller EX	eV+	2
			PLC	4
2	IP Rating (Topside/Underside/Platform & Arms)		IP20/IP65/IP67	0
			IP65/IP65/IP67	1
3	Number of Axes & Max Payload		3 Axis / 8kg	0
			4 Axis / 3kg	4

Note: Tables include representative part numbers. Please consult the product page for more details.

iX3-565 Parallel Robots
(Integrated Controller)

- High-speed operation tracks up to a conveyor speed of 1.4 m/s
- Designed with a high payload to support multi-hand (multi-picking)
- Supports fast Pick & Place on a fast conveyor
- Maximum working diameter 1,130 mm
- Maximum payload 8 kg
- EtherCAT connectivity to the Omron NJ501-R Integrated Controller and programming through familiar IEC 61131-3 programming language or scripting (eV+)

Product Page

Item	Number of Axes	IP	Maximum Payload	Working volume		
				X,Y axis (stroke)	Z axis (stroke)	theta axis (rotation angle)
iX3-565	3 axes	Standard	8 kg	1130 mm	425 mm	-
		IP65/67				
	4 axes	Standard	3 kg			±360°
		IP65/67				

Note: Additional accessories available, contact your Omron Sales Representative for additional details

Part Number Configurator

RX3-20656☐☐
(1) (2)

No.	Item	Specification	Symbol
1	Protection Rating	IP20 Topside/IP65 Underside/IP67 Platform & Arms	0
		IP65 Topside & Underside/IP67 Platform & Arms	1
2	Number of Axes	3 Axes	0
		4 Axes	4

Note: Tables include representative part numbers. Please consult the product page for more details.

Quattro Parallel Robots (Standalone)

- Four-axis arm evenly distributes the load on the robot to achieve fast, high-precision motion
- Designed with a high payload to support multi-hand (multi-picking)
- Supports high-speed Pick & Place operations on fast moving conveyors
- Maximum working diameter of 1,300mm & 1,600mm
- Maximum payloads of 10kg & 15kg
- Programmable through ACE software and eV+ language, or through the familiar IEC 61131-3 when using ePLC Connect
- USDA compliant versions available

🌐 Product Page

Item	Number of Axes	Type	IP	Maximum Payload	Working volume		
					X,Y axis (stroke)	Z axis (stroke)	theta axis (rotation angle)
Quattro 650H/HS	4	H	Standard	6 kg (P30: 15 kg)	1300 mm	500 mm	0° (fixed) (P30) ±46.25° (P31) ±92.5° (P32) ±185° (P34)
			IP65/67				
		HS	Standard	3 kg (P30: 12 kg)			
Quattro 800H/HS		H	Standard	4 kg (P30:10 kg)	1600 mm		
			IP65/67				
		HS	Standard	1 kg (P30: 7 kg)			

Note: Additional accessories available, contact your Omron Sales Representative for additional details

Part Number Configurator   1721-▢-26▢▢▢
                             (1)   (2) (3) (4)

No.	Item	Specification		Symbol
1	Bundle Type	Without Smart Controller EX	Add-On	3
		With Smart Controller EX	eV+	2
			ePLC	4
2	Reach		650mm (1300mm total)	0
			800mm (1600mm total)	3
3	Max Payload (650mm/800mm) IP Rating (Topside/Underside/Platform & Arms)	"3kg/1kg (12kg/7kg with P30)"	IP65/IP65/IP67, Stainless Steel Platform (HS)	1
		"6kg/4kg (12kg/10kg with P30)"	IP20/IP65/IP67 (H)	0
			IP66/IP66/IP67 (H)	2
4	Platform Type / Rotation		(P30) / No Rotation	0
			(P31) / ± 46.25°	1
			(P32) / ± 92.5°	2
			(P34) / ± 185°	4

Note: Tables include representative part numbers. Please consult the product page for more details.

iX4 – Parallel Robots
(Integrated Controller)

- Four-axis arm evenly distributes the load on the robot to achieve fast, high-precision motion
- Designed with a high payload to support multi-hand (multi-picking)
- Supports high-speed Pick & Place operations on fast moving conveyors
- Maximum working diameter of 1,300mm & 1,600mm
- Maximum payloads of 10kg & 15kg
- EtherCAT connectivity to the Omron NJ501-R Integrated Controller and programming through familiar IEC 61131-3 programming language or scripting (eV+)
- USDA compliant versions available

🌐 Product Page

Item	Number of Axes	Type	IP	Maximum Payload	Working volume		
					X,Y axis (stroke)	Z axis (stroke)	theta axis (rotation angle)
iX4-650H/HS	4	H	Standard IP65/67	6 kg (P30: 15 kg)	1300 mm	500 mm	0° (fixed) (P30) ±46.25° (P31) ±92.5° (P32) ±185° (P34)
		HS	Standard	3 kg (P30: 12 kg)			
iX4-800H/HS		H	Standard IP65/67	4 kg (P30:10 kg)	1600 mm		
		HS	Standard	1 kg (P30: 7 kg)			

Note: Additional accessories available, contact your Omron Sales Representative for additional details

Part Number Configurator RX4-2166☐☐☐
(1) (2) (3)

No.	Item	Specification	Type	Symbol
1	Reach	650mm		0
		800mm		3
2	Protection Rating	IP20 Topside/IP65 Underside/IP67 Platform & Arms	H	0
		IP65 Topside & Underside/IP67 Platform & Arms		1
		IP66 Topside & Underside/IP67 Platform & Arms	HS	2
3	Z Rotation / Max Payload	No Rotation / H: 15kg HS: 12kg (650mm Reach)H: 10kg HS: 7kg (800mm Reach)		0
		± 46.25° / H: 6kg HS: 3kg (650mm Reach)H: 4kg HS: 1kg (800mm Reach)		1
		± 92.5° / H: 6kg HS: 3kg (650mm Reach)H: 4kg HS: 1kg (800mm Reach)		2
		± 185° / H: 6kg HS:3kg (650mm Reach)H: 4kg HS: 1kg (800mm Reach)		4

Note: Tables include representative part numbers. Please consult the product page for more details.

i4L – SCARA Robots

- 5kg payload, high inertia and high duty ratings enable the i4L to tackle more challenging processes with ease
- Compact built-in internal controller, out-of-the-box table or wall mounting and options for rear or bottom cabling reduces the physical area required and enables a customized installation
- High visibility, customizable, multi-colored LED dome light provides an intuitive visual indication of status
- Available in 350mm, 450mm, and 550mm reaches to accommodate a wide range of applications
- Easily integrates with the full line of Omron Automation products as well as 3rd party automation platforms

🌐 Product Page

Part Number Configurator   RS4-20☐☐☐0☐
                                      (1) (2) (3)   (4)

No.	Item	Specification	Symbol
1	Control Type	Standard Control	5
		Integrated Control	6
2	Reach	350mm	3
		450mm	4
		550mm	5
3	Cabling	Rear Panel	0
		Bottom Panel	1
4	Quill Length	180mm	2
		350mm (550mm Reach Only)	4

Note: Additional accessories available, contact your Omron Sales Representative for additional details

Note: Tables include representative part numbers. Please consult the product page for more details.

i4H – SCARA Robots

- 15kg payload, high inertia and high duty ratings enable the i4H to tackle applications that require high performance
- Compact built-in internal controller, and choice of standard or inverted configurations reduces the physical area required and enables a customized installation
- High visibility, customizable, multi-colored LED ring light and LCD screen provides an intuitive visual indication of status
- Available in 650mm, 750mm, and 850mm reaches to accommodate a wide range of applications

Product Page

Part Number Configurator   RS4-20☐☐☐☐☐
(1) (2) (3) (4) (5)

No.	Item	Specification	Symbol
1	Control Type	Standard Control	5
		Integrated Control	6
2	Reach	650 mm	6
		750 mm	7
		850 mm	8
3	Mount Configuration	Standard	5
		Inverted	7
4	Protection Rating / Feature	IP20 with standard lubrication	0
		IP20 with Food Grade lubrication	5
		IP65 with Food Grade lubrication	4
		Cleanroom / ESD with Standard lubrication	1
5	Z-axis Quill Stroke Length	210 mm w/standard lubrication (IP20 and Clean Room only)	2
		210 mm w/Food Grade lubrication (IP20 and IP65 only)	3
		410 mm w/standard lubrication (IP20 and Clean Room only)	4
		410 mm w/Food Grade lubrication (IP20 and IP65 only)	5

Note: Additional accessories available, contact your Omron Sales Representative for additional details

Note: Tables include representative part numbers. Please consult the product page for more details.

Automation Control Environment (ACE) – Fixed Robot Software

- Provides an easy-to-use interface for setting up, programming, troubleshooting and operating Omron fixed industrial robots
- Fast emulation and 3D visualization of robot applications for quick proof of concept tasks
- Wizard-based user-friendly interface to calibrate and teach the robots
- Simplification of application development tasks, by means of the Application Manager modules
- Recipe Manager simplifies management of manufacturing processes and handles a range of product variations, ideal for flexible automation to reduce changeover time
- Robot Vision Manager provides algorithms and tools for easily integrating vision systems into robotic applications

🌐 **Product Page**

- Robot Vision Manager also includes vision inspection tools to improve quality assurance and traceability
- Pack Manager can manage scalable packaging lines from integration to deployment without complex scripting via step-by-step setup wizards that configure process specific items, such as controllers, robots, and conveyor belts

ACE License Configuration

Product Name	Add-On Product Names	Remarks
Ace PackManager (for ACE 4.x)	20409-000	Enables full functionality of the ACE PackManager software.
Robot Vision Manager (for ACE 4.x)	20410-000	Enables the Robot Vision Manager functionality and inspection tools library.
Dual (PackManager plus Vision)	20433-000	Enables functionality of both PackManager and Robot Vision Manager

Note: When you create robot programs without using PackManager wizards and vision system, the ACE license is not required

Note: Tables include representative part numbers. Please consult the product page for more details.

IPC Application Controller – Robot Process Manager and Vision System

- Built-in vision processor with 128GB SSD, optimized to process high resolution, high frame rate images
- Supports Omron "Manager" software packages (ie: Robot Vision Manager, PackManager, RecipeManager, 3D PickManager)
- Easy setup with ACE or Sysmac Studio
- Unique simplified thermal design to maximize uptime
- GigE PoE and USB 3.0 ports for increased connectivity and fast data transmission
- Supports up to 8 cameras simultaneously
- Compact design minimizes panel space and allows 2 mounting orientations
- Compatible with Omron S8BA Series UPS

🌐 Product Page

Specifications

Item		Specifications
Part Number		AC1-152000
Main System	CPU	Intel® Core™ i5-7440EQ
	Main Memory	8 GB DDR4
	Graphics Controller	Intel® HD Graphics
Operating System		Windows 10 Io T Enterprise LTSB - 64 bit
Storage Devices	Hard Drive	128 GB SSD Additional 3.5" hard drive slot available Additional SD memory card slot available, up to 32 GB capacity
Power Supply		20.4 to 28.8VDC
Communications Port	Power Connector	24 VDC
	I/O Connector	2 inputs (UPS signal and power OFF control) and 1 output (industrial Box PC power state)
	Ethernet Connector	Gigabit Ethernet x 3, Gigabit Ethernet with POE x 4 3W max power consumption per port
	USB	USB 3.0 x 4 (3m max cable length), USB 2.0 x 2 (5m max cable length)
	Display	DVI-Connector x 1 (up to 1,920 x 1,200 @60Hz)
	RS-232C	Standard DSUB9 connector (Non-isolated)

Note: Tables include representative part numbers. Please consult the product page for more details.

NJ501-R – Integrated Robot Controller

- Integration of Robotics, Logic, and Motion in one CPU
- Programming with variables allows users to create complex programs efficiently
- Offers speed without compromising on reliability and robustness expected from PLCs
- Conforms to IEC 61131-3 (JIS B 3503) standard programming and PLCopen function blocks for motion control and traditional V+ scripting for robot and motion control
- Complete RAS Functions: Transmission frame error check, Timeout, Bus diagnosis, Watchdog (WDT), Memory check, and Topology check, etc.
- Fast and accurate control by synchronizing all EtherCAT devices, such as vision, servos, robots, and IO with a single controller

🌐 Product Page

Specifications

Item		Product Description
Product Name		NJ50-R[ ] [ ] [ ]
Description		Machine controller with sequence, motion and robitics functionality
Software		Sysmac Studio
Programming		IEC 61131-3 (Ladder, Structured Text, Function Blocks) eV + Scripting
Program Capacity		20 MB
Memory Card		SD/SDHC memory card
Variable Capacity	No retain attribute	4 MB
	Retain attribute	2 MB
Built-in Ports		EtherCAT, Ethernet/IP, USB 2.0
Number of EtherCAT slaves		192
Max Number of robots		8
Max Numbers of Axes		64, 32, 16

Part Numbers

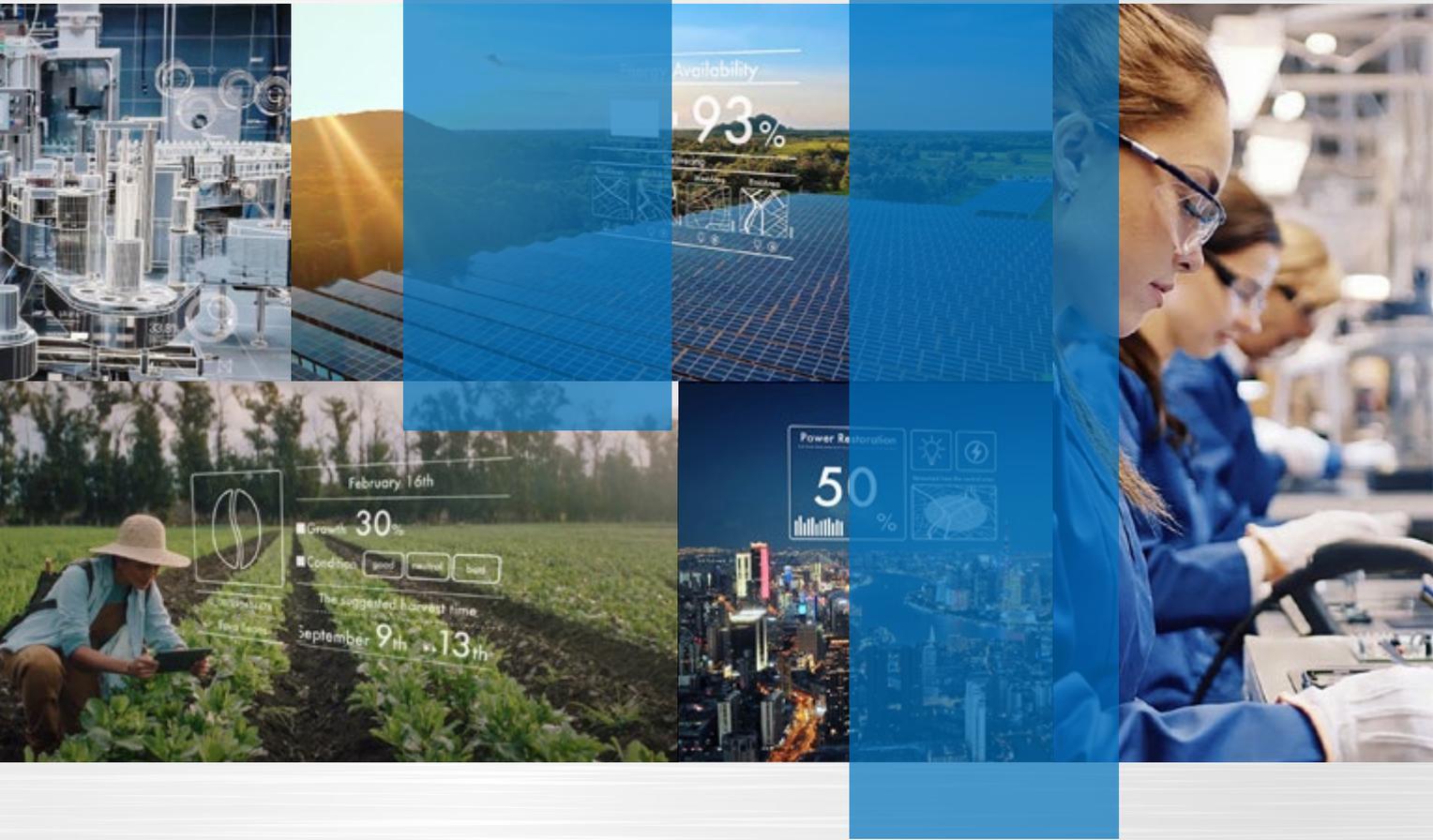| Type	Part Number
Integrated Controller (16 Axis, NO Database)	NJ501-R300
Integrated Controller (32 Axis, NO Database)	NJ501-R400
Integrated Controller (64 Axis, NO Database)	NJ501-R500
Integrated Controller (16 Axis, WITH Database)	NJ501-R320
Integrated Controller (32 Axis, WITH Database)	NJ501-R420
Integrated Controller (64 Axis, WITH Database)	NJ501-R520

Note: Tables include representative part numbers. Please consult the product page for more details.

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