Industrial automation

Elincom Group

European Union: www.elinco.eu

Russia: www.elinc.ru

Works great, looks great.

Our NY industrial Panel PC enables operator and maintenance engineer to operate and interact more effectively with the machine, using powerful, tough and future-proof PC technology for visualization, data-handling, measuring and controlling. Omron engineers used the latest insights in design simplification to cut faults caused by complexity, while optimizing operator efficiency, maximizing uptime and reducing costs.



Features

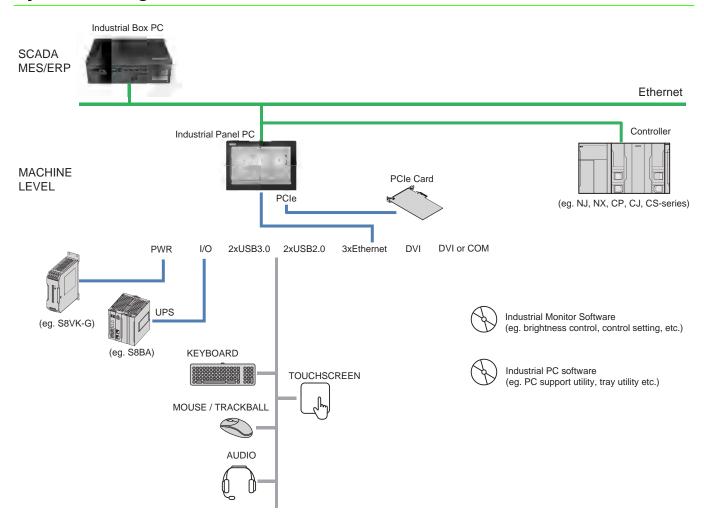
- No internal cables in the PC part eliminates faults, maximizes uptime
- Unique simplified thermal design cuts downtime
- Powerful Intel[®] Core[™] technology for optimum performance
- 12.1 and 15.4 inch industrial display
- Multi-touch projected capacitive touchscreen
- False touch detection (palm, water)
- Operator can wear gloves *

*When using gloves, ensure to use gloves that are functional with this touchscreen.

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System Configuration



Model Number Structure

The purpose of this model number legend is to provide understanding of the meaning of specifications from the model number. Models are not available for all combinations of code numbers.

$$\frac{\mathsf{NYP}}{\mathsf{1}} \ \frac{\square}{\mathsf{2}} \ - \ \frac{\square}{\mathsf{3}} \ \frac{\square}{\mathsf{4}} \ \frac{\square}{\mathsf{5}} \ \frac{\square}{\mathsf{6}} \ \frac{\square}{\mathsf{7}} \ - \ \frac{\square}{\mathsf{8}} \ \frac{\square}{\mathsf{9}} \ \frac{\square}{\mathsf{10}} \ \frac{\square}{\mathsf{11}} \ \frac{\square}{\mathsf{12}} \ \frac{\square}{\mathsf{13}} \ \frac{\square}{\mathsf{14}}$$

Item	Description	Option / Description	
1	Series name	NYP: NY- series Industrial Panel PC	
2	Processor	1 7: Intel® Core TM i7-4700EQ 4th generation CPU with fan unit for active cooling 2 5: Intel® Core TM i5-4300U 4th generation CPU with fanless cooling 1 C: Intel® Celeron® 2980U 4th generation CPU with fanless cooling	
3	Main memory	1: 2 GB, non-ECC2: 4 GB, non-ECC3: 8 GB, non-ECC	
4	Expansion slots	1: 1 PCle slot	
5	Operating system • 1: Windows Embedded Standard 7 - 32 bit • 2: Windows Embedded Standard 7 - 64 bit		
6	Storage	8: 32 GB, SSD SLC 9: 64 GB, SSD SLC C: 320 GB, HDD K: 128GB, SSD MLC	
7	Optional interface • 1: RS-232C • 2: DVI-D		
8	Display size (diagonal)	 12: 12.1 inch model, 1280 x 800 pixels, 24 bit full color 15: 15.4 inch model, 1280 x 800 pixels, 24 bit full color 	
9	Display ratio	W: Wide	
10	Touchscreen	C: Projected Capacitive Touch type	
11	Frame type	1: Aluminum frame, black	
12	Design	0: Standard	
13	Built-in options	0: None	
14	Logo • 0: OMRON • 2: Customized logo *		

^{*}For Europe only. Please consult your OMRON representative for details.

Ordering Information

NY-series Industrial PC Platform

Recommended models

The industrial Panel PC has extended configuration possibilities to meet your requirements, below an overview of the most used and recommended models. Selecting one of the models below will bring the benefit of faster delivery times.

In case your preferred model is not listed below, please contact your Omron representative to discuss the possibilities.

Draduat							
Product name	Display size	Operating system	CPU type	RAM memory (non-ECC type)	Storage size	Interface option	Model
			Intel [®] Core [™] i7-4700EQ	8 GB	64 GB SSD (SLC)	RS-232C	NYP17-31291-12WC1000
		Windows Embedded	Intel® Core™ i5-4300U	8 GB	128 GB SSD (MLC)	RS-232C	NYP25-312K1-12WC1000
	12.1 inch	Standard 7 - 64bit	Intel® Core™ i5-4300U	8 GB	64 GB SSD (SLC)	RS-232C	NYP25-31291-12WC1000
			Intel® Celeron® 2980U	8 GB	128 GB SSD (MLC)	RS-232C	NYP1C-312K1-12WC1000
Industrial		Windows Embedded Standard 7 - 32bit	Intel® Celeron® 2980U	4 GB	128 GB SSD (MLC)	RS-232C	NYP1C-211K1-12WC1000
Panel PC			Intel® Core™ i7-4700EQ	8 GB	64 GB SSD (SLC)	RS-232C	NYP17-31291-15WC1000
		Windows Embedded	Intel® Core™ i5-4300U	8 GB	128 GB SSD (MLC)	RS-232C	NYP25-312K1-15WC1000
15	15.4 inch	Standard 7 - 64bit	Intel® Core™ i5-4300U	8 GB	64 GB SSD (SLC)	RS-232C	NYP25-31291-15WC1000
			Intel® Celeron® 2980U	8 GB	128 GB SSD (MLC)	RS-232C	NYP1C-312K1-15WC1000
		Windows Embedded Standard 7 - 32bit	Intel® Celeron® 2980U	4 GB	128 GB SSD (MLC)	RS-232C	NYP1C-211K1-15WC1000

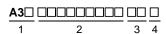
Accessories

Optional Hardware

Product name	Specifications	Model
SD Moment Cardo	Card type: SD Card Capacity: 2 GB Format: FAT16	HMC-SD291
SD Memory Cards	Card type: SDHC Card Capacity: 4 GB Format: FAT32	HMC-SD491
USB Flash Drives	Capacity: 2 GB	FZ-MEM2G
USB Flash Drives	Capacity: 8 GB	FZ-MEM8G
	Storage type: HDD Capacity: 320 GB	NY000-AH00
Storage Devices	Storage type: SSD SLC Capacity: 32 GB	NY000-AS00
Storage Devices	Storage type: SSD SLC Capacity: 64 GB	NY000-AS01
	Storage type: SSD MLC Capacity: 128 GB	NY000-AS02
USB Type-A to USB Type-B Cables	Cable length: 2 m USB 2.0 Minimum bend radius: 25 mm	FH-VUAB 2M
USB Type-A to USB Type-B Cables	Cable length: 5 m USB 2.0 Minimum bend radius: 25 mm	FH-VUAB 5M
DVI Cables	Cable length: 2 m Supports DVI-D Minimum bend radius: 36 mm	NY000-AC00 2M
DVI Cables	Cable length: 5 m Supports DVI-D Minimum bend radius: 36 mm	NY000-AC00 5M
Power Supply	Output voltage: 24 VDC	S8VK-G□□24
UPS *	Output voltage during backup operation: 24 VDC ± 5%	S8BA
UPS Communication Cable	Cable length: 2 m Signals for • Signal output (BL, TR, BU, WB) • Remote ON/OFF input • UPS Stop Signal input (BS)	S8BW-C02

^{*} Revision number 04 or later.

The revision number of the UPS can be retrieved from the serial number label on the product and the product packaging.



Item	Description		
1	Product code		
2	Product period and sequential number		
3	Revision number		
4	RoHS status		

Spare Parts

The following spare parts for the Industrial Panel PC are available.

Product name	Specifications	Model
Battery	One battery is supplied with the Industrial Panel PC. The battery supplies power to the real-time clock. The battery is located inside the Industrial Panel PC. Service life: 5 years at 25°C	CJ1W-BAT01
Fan Unit	The Fan Unit is available for the Industrial Panel PC that has active cooling. Service life: 70,000 hours of continuous operation at 40°C with 15% to 65% relative humidity. Shelf life: 6 months This is the storage limitation with no power supplied.	NY000-AF00
Accessory Kit	Replacement kit containing all accesories supplied with Industrial Panel PC. • Power connector • I/O connector • Drive bracket for drive installation • 4 mounting screws for drive installation • PCIe Card support for PCIe Card installation • PCIe Card clip for PCIe Card installation	NY000-AK00

Installed Support Software

Item	Specifications
Industrial PC Support Utility	The Industrial PC Support Utility is a software utility to assist in diagnosing and resolving problems of the Industrial Panel PC. It is pre-installed on the Industrial Box PC and the Industrial Panel PC.
Industrial PC Tray Utility	The Industrial PC Tray Utility is a software utility that provides information about the current state of the Industrial PC, its related devices, and associated software. It is pre-installed on the Industrial Box PC and the Industrial Panel PC.
Industrial PC System API	The Industrial PC System API allows programmers to create programs that can retrieve information or set an indicator status of the Industrial Panel PC. The API makes use of the included IPC System Service to manage the hardware. It is pre-installed on the Industrial Box PC and the Industrial Panel PC.
Industrial Monitor Utility	The Industrial Monitor Utility provides a user interface to control settings and display details of connected Industrial Monitors. It is pre-installed on the Industrial Box PC and the Industrial Panel PC.
Industrial Monitor Brightness Utility	The Industrial Monitor Brightness Utility is a small software utility that allows you to control the brightness of the screen backlight of all connected Industrial Monitors. It is pre-installed on the Industrial Box PC and the Industrial Panel PC.
Industrial Monitor API	The Industrial Monitor API allows programmers to create applications that can control the hardware features and retrieve information from connected Industrial Monitors. It is pre-installed on the Industrial Box PC and the Industrial Panel PC.

Specifications

Performance Specifications

	Ite	m		NYP17-□□□□	NYP25-□□□□□	NYP1C-□□□□□
		CPU type		Intel [®] Core™ i7-4700EQ	Intel [®] Core [™] i5-4300U	Intel® Celeron® Processor 2980U
		Cores / Threads		4/8	2 / 4	2/2
		CPU base frequency		2.4 GHz	1.9 GHz	1.6 GHz
	CPU		bo frequency	3.4 GHz	2.9 GHz	_
		Cache		6 MB	3 MB	2 MB
		Cooling detail	ils	Requires active cooling (fan)		
Main avatam	Memory size		4, 8 GB	2, 4, 8 GB	2, 4, 8 GB	
Main system	Memory	Memory type		DDR3L (non ECC)	2, 1, 0 02	2, 1, 0 02
	Trusted platfor	m module (TPM		Ensure the integrity of the platform Disk encryption Password protection and other uses of encryption		
	0			Intel [®] HD Graphics. Up to tw	o independent screens.	
	Graphics contr	roller		Intel® HD Graphics 4600	Intel® HD Graphics 4400	Intel® HD Graphics
	Watchdog			Yes		`
Onersting system	_			Windows Embedded Standa	rd 7 - 32 bit	
Operating system	Windows OS			Windows Embedded Standa	rd 7 - 64 bit	
		Hard disk dri	ve	• HDD - 320 GB • Serial ATA 3.0		
Storage devices	Drives	Solid state	SLC type	SLC type - long life SSD32 GB and 64 GB modelsSerial ATA 3.1	32 GB and 64 GB models	
		drive	MLC type	MLC type - industrial MLC 128 GB Serial ATA 3.1		
	Drive bay (HDD	D/SSD) *1		2	2	1
	Power connect	tor		• 24 VDC		
	I/O connector			2 inputs (Power ON/OFF Inp	ut and UPS Mode Input) and	1 output (Power Status Output)
	USB connectors	USB 3.0		2 ports 900 mA maximum current 3 m maximum cable length		
Connectors		USB 2.0		2 ports500 mA maximum current5 m maximum cable length		
	Ethernet	Number of available ports		3		
	connectors Physical layer		r	10BASE-T, 100BASE-TX or 1000BASE-T		
		Video interface		Digital or analog	Digital only	
	DVI-I connector	Resolution		Up to 1,920 x 1,200 pixels at 60 Hz		
	Commodici	Maximum DV	I cable length	Dependent upon connected monitor type and resolution		
	RS-232C			Standard SUBD9 connector (Non-Isolated)		
Optional		Video interfa	ce	Digital only		
connector (select one per system)	DVI-D	Resolution		Up to 1,920 x 1,200 pixels at 60 Hz		
		Maximum DV	I cable length	Dependent upon connected monitor type and resolution		
	Configuration			X4 (4 lanes) up to Gen 3 X1 (1 lane) up to Gen 2		
PCIe Card Slot	Card height			Standard height cards, 4.20 inches (106.7 mm) *2		
	Card length	<u>~</u>		Half length cards, 6.6 inches	(167.65 mm)	
	Model			CJ1W-BAT01		
Battery	Service life			5 years at 25°C		
	Model			NY000-AF00		
Fan unit	Service life		70,000 hours of continuous operation at 40°C with 15% to 65% relative humidity			
	001 1100 1110			70,000 flours of continuous c	peranon at 40 0 with 1370 to	0070 Tolative Harrialty

^{*1.} Depending on the model one or two drives are supported. *2. Low profile cards, 2.536 inches (64.4 mm) are not supported.

Display Specifications

		ltem	Specifications		
	ILCIII		12.1 Inch models	15.4 Inch models	
		Display device	TFT LCD		
		Screen size	12.1 inches	15.4 inches	
		Surface treatment	Anti glare treatment		
		Surface hardness	Mohs scale: 5 - 6		
	Display panel	Resolution	1,280 × 800 pixels at 60 Hz (horizontal ×	vertical)	
	*1	Colors	16,770,000 colors		
		Effective display area	261 X 163 mm (horizontal X vertical)	331 × 207 mm (horizontal × vertical)	
Display		View angles	Left: 60°, Right: 60°, Top: 60°, Bottom: 60	0	
Display		Life	50,000,000 operations min.		
		EMC	Correct touchscreen operation is possible w	ithin allowable EMC immunity conditions	
		Technology	Projected capacitive		
	Touch	Touch resolution	Touch accuracy 1.5% (4-5 mm)		
	Toucil	Multitouch	Up to 5 simultaneous touches		
		Features	Water detection *2, hand palm rejection *	ķ 3, gloves ķ 4	
	Pooklight	Life	50,000 hours min. * 5		
	Backlight	Brightness adjustment	200 levels * 6		

^{*1.} There may be some defective pixels in the display. This is not a fault as long as the numbers of defective light and dark pixels fall within the following standard range: light and dark pixels 10 or less. (There must not be 3 consecutive light/dark pixels.)

Electrical Specifications

ltem				Specifications			
		item		12.1 Inch models	15.4 Inch models		
Rated power sup	oly voltage			24 VDC, non-isolated			
Allowable power	supply voltage ra	inge		20.4 to 28.8 VDC			
Grounding metho	d			Ground to less than 100 Ω			
Inrush current				At 24 VDC: 12 A / 6 ms max. for cold s	start at room temperature		
Overvoltage cate	gory			JIS B3502 and IEC 61131-2: Category	/ II		
EMC immunity le	vel			IEC 61132-2: Zone B			
RTC accuracy				At ambient temperature of 55°C: -3.5 t At ambient temperature of 25°C: -1.5 t At ambient temperature of 0°C: -3 to +	o +1.5 min error per month		
Power button life				100,000 operations			
Battery life				5 years at 25°C (for battery CJ1W-BA	5 years at 25°C (for battery CJ1W-BAT01)		
Fan life				8 years of continuous operation at 40°C			
	Maximum power consumption including drives and expansions		Intel® Core™ i7-4700EQ CPU	132 W			
			Intel® Core™ i5-4300U CPU	93 W			
			Intel® Celeron® 2980U CPU	84 W			
	Industrial Panel PC		Intel® Core™ i7-4700EQ CPU 99 W				
	excluding drive		Intel® Core™ i5-4300U CPU	70 W			
	expansions		Intel® Celeron® 2980U CPU	63 W			
Power		HDD 32	0 GB	2 W			
consumption *	Dutana	SSD SLC 32 GB		2 W			
	Drives	SSD SL	.C 64 GB	2 W			
		SSD MI	_C 128 GB	2 W			
	Expansions	USB		14 W max. ((2 x 500 mA at 5 V) + (2 x 900 mA at 5 V))			
			Intel® Core™ i7-4700EQ CPU	15 W max.			
		PCle	Intel® Core™ i5-4300U CPU Intel® Celeron® 2980U CPU	5 W max.			

Note: Refer to the Industrial Panel PC User's Manual (W555) for detail.

^{*}The total power consumption is the sum of the power consumption of all items that are installed in your Industrial Panel PC. The required supply specifications for an Industrial Panel PC with an Intel® Core™ i7-4700EQ CPU.

Item	Minimum power requirements
Power supply	240 W
UPS	120 W

The required supply specifications for an Industrial Panel PC with an Intel® Core™ i5-4300U CPU or Intel® Celeron® 2980U CPU.

Item	Minimum power requirements
Power supply	120 W
UPS	120 W

^{*2.} If water is detected the touch functionality will not be available.

^{*3.} If a palm is detected that specific area is neglected.

^{*4.} The touchscreen can be operated when wearing gloves. Check correct usage of the gloves before using them. *5. This is the estimated time before brightness is reduced by half at room temperature and humidity. The life expectancy is drastically shortened if used at high temperatures.

^{*6.} If the brightness is set to very dark, it causes flickering or the screen will be too dark to use.

Components and functions

The intent behind our IPC platform is to empower engineers to become unstoppable in developing machines and factories that are better, faster and safer by giving them the freedom and flexibility to explore the opportunities provided by modern IT. In line with Omron's traditional quality standards, the Industrial Panel PC is designed to meet the demands of industrial users for maximum robustness and reliability.

Powerful CPU options

Three powerful CPU options provide high performance for various applications.

Fanless cooling for multiple CPU types

The Industrial Panel PC has passive cooling for multiple CPU types which means no moving parts and less maintenance effort.

Easy access to storage devices and the PCI Express Card

Adding or changing storage devices (HDD, SSD) and the PCI Express Card is fast and simple.

LED indicators



DVI-I video interface

3 1Gbps Ethernet ports

Built-in IO

4 USB ports

Built-in SD Memory Card slot

LCD touchscreen

Multi-touch functionality

Up to 5 simultaneous touches are supported for complex functions.

Operation Environment Specifications

Item	Specifications
Ambient operating temperature *1	0 to 55°C
Ambient storage temperature *1	-20 to 70°C
Ambient operating humidity *1	10% to 90% with no condensation
Ambient storage humidity *1	10% to 90% with no condensation
Operating atmosphere	No corrosive gases
Altitude	2,000 m max.
Noise resistance (during operation)	Conforms to IEC61000-4-4, 2kV (power lines)
Vibration resistance (during operation)	The vibration resistance depends on the storage device(s): • For a Panel PC with only SSD storage devices: 5 to 8.4 Hz with 3.5 mm single amplitude and 8.4 to 150 Hz with 9.8 m/s² for 10 times each in X, Y and Z directions. Conforms to IEC 60068-2-6. • For a Panel PC with one or more HDD storage devices the Panel PC must be installed in a vibration free environment. *2
Shock resistance (during operation)	Conforms to IEC 60028-2-27. 147 m/s², 3 times in each X, Y and Z directions
Degree of protection	Front of Monitor: IP65 *3
Pollution degree	2 or less: Conforms to JIS B3502 and IEC 61131-2.
Applicable standards *4 EU Directives: EMC Directive 2014/30/EU (EN 61131-2), KC Registration, RCM	

^{*1.} The allowed ambient operating temperature and ambient humidity depend on product type, CPU type, mounting orientation, and storage device type.

*2. A Panel PC with one or more HDD storage devices should not be used in applications subject to vibration.

Examples of applications subject to vibration:

- AGV (Automated Guided Vehicles)
- Rail vehicle
- Stacker crane
- Elevator
- Tableting machine
- · Connector pin assembling machine
- Bending machine

Ensure your Panel PC with HDD does not vibrate. When in doubt use a Panel PC with SSD storage devices.

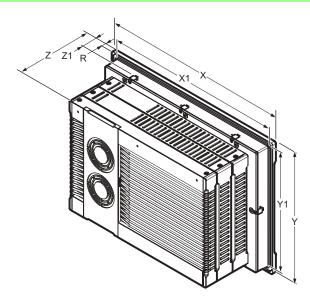
- *3. The Panel PC may not operate properly in locations subjected to oil splashes for extended periods of time.
- ***4.** Refer to the OMRON website (www.ia.omron.com) or contact your OMRON representative for the most recent applicable standards for each model.

Storage Device Specifications

Item	Specifications				
Model	NY000-AS00	NY000-AS01	NY000-AS02	NY000-AH00 *1	
Capacity	32 GB	64 GB	128 GB	320 GB	
Туре	SSD (SLC) SSD (MLC)			HDD	
S.M.A.R.T. support	Yes				
Rotation speed	-			5,400 r/min	
Interface	Serial ATA 3.1	Serial ATA 3.0			
Sustained standard read speed	Up to 160 MB/s Up to 430 MB/s			-	
Sustained standard write speed	Up to 150 MB/s Up to 190 MB/s			-	
Operating temperature	0 to 70°C			5 to 55°C	
Operating humidity	10% to 95% (with no condens	10% to 95% (with no condensation) 29°C wet-bulb temperature max.			
Storage temperature	-40 to 100°C			-40 to 65°C	
Storage humidity	10% to 95% (with no condens	8% to 90% (with no condensation) 40°C wet-bulb temperature max.			
Life	1,500 TB written / 11 years at a daily workload of 350 GB	3,000 TB written / 23 years at a daily workload of 350 GB	114 TB written / 3 years at a daily workload of 100 GB	Approximately 5 years or 20,000 powered-ON hours (whichever comes first) under the following conditions: • 25°C at 101.3 kPa • Less than 333 powered-ON hours/month *2 • Less than 20% operation while powered-ON *3 • Less than 1.30 x 10 ⁶ seeks/month	

^{*1.} For a Panel PC with an HDD: this device can only be installed in a vibration free environment only.
*2. Powered-ON hours include sleep and standby modes.
*3. Operation includes seeking, writing, and reading functions.

Dimensions



Item	Specifications		
iteiii	12.1 Inch	15.4 Inch	
Panel preparation dimensions	Cutout Width X1 = 314 ⁻⁰⁺¹ mm Cutout Height Y1 = 216 ⁻⁰⁺¹ mm	Cutout Width X1 = 383 ⁻⁰⁺¹ mm Cutout Height Y1 = 259 ⁻⁰⁺¹ mm	
Panel thickness range *	Panel thickness range Z1 = 1.6 to 6.0 mm	Panel thickness range Z1 = 1.6 to 6.0 mm	
Dimensions	Width X = 332 mm Height Y = 234 mm Depth Z = 121 mm	Width X = 401 mm Height Y = 277 mm Depth Z = 121 mm	
Monitor thickness in front of panel	Rim thickness R = 8.0 mm		
Weight	6.1 kg	7.2 kg	

^{*} The minimum panel thickness depends on the panel material.

Recommended Related Products



Industrial Box PC NY-series

The Industrial Box PC is designed to meet the specific needs of the industrial environment. Design simplification and future-proof architecture minimize the risk of failure.



Industrial Monitor NY-series

The Industrial Monitor is of key importance at the interface between operator and system. The Industrial Monitor is efficient, effective and highly visible with an attractive design.



UPS S8BA-series

The OMRON S8BA UPS protects the Industrial PC from power failures, voltage variations and instantaneous voltage drops.

Related Manuals

The following manuals are related. Use these manuals for reference.

Manual name	Cat. No.	Model numbers	Application	Description
Industrial Box PC User's Manual	W553	NYB17-□1□□□ NYB25-□1□□□ NYB1C-□1□□□	Learning all basic information about the Industrial Box PC. This includes introductory information with features, hardware overview, software overview, specifications, mounting, wiring, connecting, operating and maintaining the Industrial Box PC.	An introduction to the Industrial Box PC is provided along with the following information: • Overview • Hardware • Software • Specifications • Installation • Operating Procedures • Maintenance
Industrial Monitor User's Manual	W554	NYM15WC100□ NYM12WC100□	Learning all basic information about the Industrial Monitor. This includes introductory information with features, hardware overview, specifications, mounting, wiring, connecting, operating and maintaining the Industrial Monitor.	An introduction to the Industrial Monitor is provided along with the following information: • Overview • Hardware • Software • Specifications • Installation • Operating Procedures • Maintenance
Industrial Panel PC User's Manual	W555	NYP17115WC100	Learning all basic information about the Industrial Panel PC. This includes introductory information with features, hardware overview, software overview, specifications, mounting, wiring, connecting, operating and maintaining the Industrial Panel PC.	An introduction to the Industrial Panel PC is provided along with the following information: Overview Hardware Software Specifications Installation Operating Procedures Maintenance
UPS S8BA User's Manual	U702	S8BA	Learning the information that is necessary to use the Uninterruptible Power Supply (UPS) Unit.	An introduction to the UPS is provided along with the following information: Overview Preparation Installation and Connection Check and Start Operation Maintenance and Inspection Shutdown Processing I/O Signal Functions Troubleshooting

Terms and Conditions Agreement

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Programmable Products.

Omron Companies shall not be responsible for the user's programming of a programmable Product, or any consequence thereof.

Performance Data.

Data presented in Omron Company websites, catalogs and other materials is provided as a guide for the user in determining suitability and does not constitute a warranty. It may represent the result of Omron's test conditions, and the user must correlate it to actual application requirements. Actual performance is subject to the Omron's Warranty and Limitations of Liability.

Change in Specifications.

Product specifications and accessories may be changed at any time based on improvements and other reasons. It is our practice to change part numbers when published ratings or features are changed, or when significant construction changes are made. However, some specifications of the Product may be changed without any notice. When in doubt, special part numbers may be assigned to fix or establish key specifications for your application. Please consult with your Omron's representative at any time to confirm actual specifications of purchased Product.

<u>Errors and Omissions.</u> <u>Information presented by Omron Companies has been checked and is believed to be accurate; however, no responsibility is accurate.</u> assumed for clerical, typographical or proofreading errors or omissions.

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In the interest of product improvement, specifications are subject to change without notice.

