Industrial PC Platform NY-series Industrial Panel PC

NYP

CSM NYP DS F 6 1

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
- · Industrial CPU's with long availability
- 12.1, 15.4 and 18.5 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.

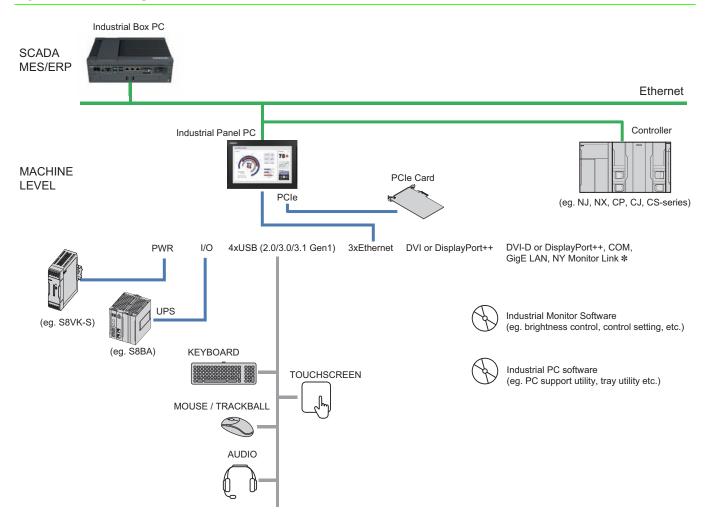
Windows is a registered trademark of Microsoft Corporation in the United States and other countries.

The SD and SDHC logos are trademarks of SD-3C, LLC.

Intel, Celeron and Intel Core are trademarks or registered trademarks of Intel Corporation or its subsidiaries in the United States and other countries. CFAST is a registered trademark of CompactFlash Association.

DisplayPort and VESA are trademarks owned by the Video Electronics Standards Association (VESA®) in the United States and other countries. Other company names and product names in this document are the trademarks or registered trademarks of their respective companies. The product photographs and figures that are used in this document may vary somewhat from the actual products.

System Configuration



*NY Monitor Link option: Connect monitor up to 100 m via Ethernet cable.

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.

NYP													
1	2	3	4	5	6	7	8	9	10	11	12	13	14

Item	Description	Option / Description
1	Series name	NYP: NY- series Industrial Panel PC
2	Processor	27: Intel® Core™ i7-7820EQ 7th generation CPU with fan unit for active cooling 35: Intel® Core™ i5-7300U 7th generation CPU with fanless cooling 65: Intel® Core™ i5-1145GRE 11th generation CPU with fanless cooling 13: Intel® Core™ i3-1115GRE 11th generation CPU with fanless cooling 2C: Intel® Celeron® 3965U 7th generation CPU with fanless cooling 2A: Intel® Atom® x5-E3940 with fanless cooling 3A: Intel® Atom® x6425RE with fanless cooling
3	Main memory	1: 2 GB, non-ECC 2: 4 GB, non-ECC 3: 8 GB, non-ECC 4: 16 GB, non-ECC 5: 32 GB, non-ECC 6: 64 GB, non-ECC C: 8 GB, ECC D: 16 GB, ECC
4	Expansion slots	0: No PCIe slot 1: 1 PCIe slot
5	Operating system	0: No operating system 3: Windows 10 IoT Enterprise 2016 LTSB - 64 bit 4: Windows 10 IoT Enterprise 2019 LTSC - 64bit 5: Windows 10 IoT Enterprise 2021 LTSC - 64 bit F: Windows 10 IoT Enterprise 2019 LTSC - 64 bit + FH software
6	Storage	0: No disk 1: 128 GB, CFast 3DTLC 2: 256 GB, CFast 3DTLC 3: 512 GB, CFast 3DTLC 5: 64 GB, CFast MLC 6: 128 GB, CFast MLC 7: 256 GB, CFast MLC 9: 64 GB, SSD SLC C: 320 GB, HDD D: 500 GB, HDD E: 1 TB, HDD F: 128 GB, SSD 3DTLC G: 256 GB, SSD 3DTLC H: 512 GB, SSD 3DTLC K: 128 GB, SSD MLC L: 256 GB, SSD MLC L: 256 GB, SSD MLC M: 500 GB, SSD MLC P: 1 TB, SSD 3DTLC
7	Optional interface	0: No optional interface 1: RS-232C 2: DVI-D 4: DisplayPort++ 6: NY Monitor Link
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 19: 18.5 inch model, 1,920 x 1,080 pixels, 24 bit full color
9	Display ratio	W: Wide
10	Touchscreen	C: Projected Capacitive Touch type
11	Frame type	1: Panel mounted
12	Material/finish	0: Aluminum, black paint 1: Aluminum, Nickel plating
13	Built-in options	0: None
14	Logo	0: OMRON 2: Customized logo *

^{*} 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.

Product name	Display size	Operating system	CPU type	RAM memory (non-ECC type)	Storage size	Interface option	PCIe-slot	Model		
		Windows 10 IoT Enterprise 2016	Intel [®] Core™ i5-7300U	8 GB	256 GB CFast type (MLC)	No	No	NYP35-30370-12WC1000		
		LTSB - 64 bit	Intel®Celeron™ 3965U	8 GB	256 GB CFast type (MLC)	No	No	NYP2C-30370-12WC1000		
		Windows 10 IoT Enterprise 2019	Intel [®] Core™ i7-7820EQ	8 GB	128 GB CFast type (MLC)	No	No	NYP27-30460-12WC1000		
	12.1 Inch	LTSC - 64bit	Intel® Atom® x5-E3940	4 GB	128 GB CFast type (MLC)	No	No	NYP2A-20460-12WC1000		
		Windows 10 IoT	Intel [®] Core™ i3-1115GRE	16 GB	256 GB CFast type (MLC)	No	No	NYP13-40520-12WC1000		
		Enterprise 2021 LTSC - 64 bit	Intel [®] Atom [®] x6425RE Processor	8 GB	256 GB CFast type (3DTLC)	No	No	NYP3A-30520-12WC1000		
		Windows 10 IoT Enterprise 2016	Intel® Core™ i5-7300U	8 GB	256 GB CFast type (MLC)	No	No	NYP35-30370-15WC1000		
		LTSB - 64 bit	Intel®Celeron™ 3965U	8 GB	256 GB CFast type (MLC)	No	No	NYP2C-30370-15WC1000		
Industrial		Windows 10 IoT Enterprise 2019	Intel® Core™ i7-7820EQ	8 GB	128 GB CFast type (MLC)	No	No	NYP27-30460-15WC1000		
Panel PC	15.4 Inch	LTSC - 64bit	Intel® Atom® x5-E3940	4 GB	128 GB CFast type (MLC)	No	No	NYP2A-20460-15WC1000		
		Windows 10 IoT	Intel [®] Core™ i5-1145GRE	16 GB	512 GB CFast type (MLC)	No	No	NYP65-40530-15WC1000		
				Enterprise 2021 LTSC - 64 bit	Intel [®] Atom [®] x6425RE Processor	16 GB	256 GB CFast type (3DTLC)	No	No	NYP3A-40520-15WC1000
		Windows 10 IoT	Intel® Core™ i5-7300U	8 GB	256 GB CFast type (MLC)	No	No	NYP35-30370-19WC1000		
		Enterprise 2016 LTSB - 64 bit	Intel [®] Celeron™ 3965U	8 GB	256 GB CFast type (MLC)	No	No	NYP2C-30370-19WC1000		
		Windows 10 IoT	Intel® Core™ i7-7820EQ	8 GB	128 GB CFast type (MLC)	No	No	NYP27-30460-19WC1000		
	18.5 Inch *	* Enterprise 2019 LTSC - 64bit	Intel® Atom® x5-E3940	4 GB	128 GB CFast type (MLC)	No	No	NYP2A-20460-19WC1000		
		Windows 10 IoT	Intel [®] Core™ i5-1145GRE	16 GB	256 GB CFast type (3DTLC)	No	No	NYP65-40520-19WC1000		
		Enterprise 2021 LTSC - 64 bit	Intel® Core™ i3-1115GRE	16 GB	256 GB CFast type (3DTLC)	No	No	NYP13-40520-19WC1000		

^{★ 18.5} inch models also available with Nickel Plating front.

Accessories

Optional Hardware

Product name	Specifications	Model
	VESA mount	NY000-AB06
	VESA mount	NY000-AB07
	VESA mount	NY000-AB08
Mounting Brackets *1	VESA mount	NY000-AB09
	VESA mount	NY000-AB10
	VESA mount	NY000-AB11
	VESA mount handle	NY000-AB12
	Card type: SD Card Capacity: 2 GB Format: FAT16	HMC-SD292
SD Memory Cards	Card type: SDHC Card Capacity: 4 GB Format: FAT32	HMC-SD492
	Card type: SDHC Card Capacity: 16 GB Format: FAT32	HMC-SD1A2
	Capacity: 2 GB	FZ-MEM2G
JSB Flash Drives	Capacity: 8 GB	FZ-MEM8G
	Storage type: HDD	
	Capacity: 320 GB	NY000-AH00
	Storage type: HDD Capacity: 500 GB	NY000-AH01
	Storage type: HDD Capacity: 1 TB	NY000-AH02
	Storage type: SSD SLC Capacity: 32 GB	NY000-AS00
	Storage type: SSD SLC (Apacer) Capacity: 64 GB Storage type: SSD SLC (Hagiwara)	NY000-AS01
	Capacity: 64 GB Storage type: SSD MLC (Innodisk)	NY000-AS03
	Capacity: 128 GB Storage type: SSD MLC	NY000-AS04
	Capacity: 500 GB Storage type: SSD 3DTLC	NY000-AS05
	Capacity: 1 TB Storage type: SSD MLC (Innodisk)	NY000-AS07
	Capacity: 256 GB Storage type: SSD 3DTLC (Acon)	NY000-AS08
Storage Devices	Capacity: 128 GB Storage type: SSD 3DTLC (Acon)	NY000-AS09
	Capacity: 256 GB Storage type: SSD 3DTLC (Acon)	NY000-AS10
	Capacity: 512 GB Storage type: SSD 3DTLC (Acon)	NY000-AS11 NY000-AS12
	Capacity: 1 TB Storage type: SSD 3DTLC (Acon)	NY000-AS13
	Capacity: 2 TB Storage type: CFast MLC	
	Capacity: 64 GB Storage type: CFast MLC	NY000-AT00
	Capacity: 128 GB Storage type: CFast MLC	NY000-AT01
	Capacity: 256 GB Storage type: CFast 3DTLC (Acon)	NY000-AT02
	Capacity: 128 GB Storage type: CFast 3DTLC (Acon)	NY000-AT05 NY000-AT06
	Capacity: 256 GB Storage type: CFast 3DTLC (Acon)	NY000-AT07
	Capacity: 512 GB Cable length: 2 m	
DVI Cables	Supports DVI-D Minimum bend radius: 36 mm Cable length: 5 m	NY000-AC00 2M
	Cable length: 5 m Supports DVI-D Minimum bend radius: 36 mm	NY000-AC00 5M
	Output voltage: 24 VDC Push-In Plus terminal blocks	S8VK-G = 24
Power Supply	Output voltage: 24 VDC EtherNet/IP, Modbus TCP-Compatible	S8VK-X□□□24A-EIP
	Output voltage: 24 VDC Compact	S8VK-S□□□24
	Output voltage: 24 VDC Three-phase 200-V Power Supplies	S8VK-WA□□□24

Product name	Specifications	Model
UPS *2	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

Note: Orders for NY000-AS02 are no longer accepted, as of November 30, 2018.

*1. Select the required type. Industrial Panel PC and Industrial Monitor type only.

NY000-AB06: for NYP35-\[DO] \[DO] -12WC, NYP2C-\[DO] \[DO] -12WC, NYP2A-\[DO] \[DO] -12WC, NYP65-\[DO] \[DO] -12WC,

NYP13-\(0 \) \(\) \(12WC, \) \(NYP3A-\(0 \) \(\) \(-12WC \)

NY000-AB07: for NYP35-00--15WC, NYP2C-00--15WC, NYP2A-00--15WC, NYP65-00--15WC,

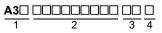
NYP13-\(\text{\texictex{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{

NY000-AB09: for NYP35--11--12WC, NYP2C--11--12WC, NYP27--00--12WC NY000-AB10: for NYP35--11--15WC, NYP2C--11--15WC, NYP27--00--15WC, NYP65--1--15WC, NYP13--15WC NY000-AB11: for NYP35--11--19WC, NYP2C--11--19WC, NYP27--00--19WC

NY000-AB12 Handle for AB06 to AB11

*2. Revision number 09 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 • PCle Card support for PCle Card installation • PCle Card clip for PCle Card installation	NY000-AK00
	Power connectors (10 pcs) for Industrial Box PC and Industrial Panel PC	NY000-AK01

^{*} Only for models with replaceable battery.

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.

Item	Specifications
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.
Industrial PC Rescue Disk Creator	The Industrial PC Rescue Disk Creator creates a USB Rescue Disk which can be used to back-up and restore the Omron IPC Operating System. It is pre-installed on the Industrial Box PC and the Industrial Panel PC.

Soft-NA

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

System Requirements

	Item	Requirement		
OS		Windows 10 Pro Version 1903 or later 64 bit		
Processor		Intel Atom® x5-E3940 equivalent or higher processor		
RAM		4 GB or more		
Free space in the hard driv	e necessary for installation	1 GB or more		
Optical disk drive		DVD-ROM drive		
Communication next	USB	USB2.0 Type-A x 2 *1		
Communication port	LAN	1 GB or more DVD-ROM drive		

^{*1.} Since one port is for project transfer, it is not required unless the corresponding path is used.

Note: Refer to NA-series catalog (Cat. No. V413) for the system configuration of Soft-NA.

General Specifications

Performance Specifications

	Iter	m		NYP65-01000	NYP13-01000	NYP65-□0□□□	NYP13-0000	NYP3A-0000		
		CPU type		Intel [®] Core™ i5-1145GRE	Intel [®] Core™ i3-1115GRE	Intel [®] Core [™] i5-1145GRE	Intel [®] Core™ i3-1115GRE	Intel Atom® x6425RE		
		Cores / Threads		4/8	2/4	4/8	2/4	4 / 4		
		CPU base frequency		1.5 GHz	2.2 GHz	1.5 GHz	2.2 GHz	1.9 GHz		
	CPU	Maximum frequency		4.1 GHz	3.9 GHz	4.1 GHz	3.9 GHz	-		
		Cache		8 MB	6 MB	8 MB	6 MB	1.5 MB		
		Cooling details		Passive cooling (fan	less)					
		Intel CPU	category	Industrial (100% ope	eration minimal 10yr)					
	Memory size *3		8, 16, 32, 64 GB				4, 8, 16, 32 GB			
		Memory ty	уре	DDR4						
Main system	Memory	Package I Format	Memory	SO-DIMM						
	illomory	Serial Presence	Speed grade	3200 MT/s						
		Detect (SPD)	CAS latency	CL17						
	Trusted platform module (TPM) Graphics controller			Available						
				Intel® Iris® Xe Graphics. Up to four independent screens.	Intel® UHD Graphics. Up to four independent screens.	Intel® Iris® Xe Graphics. Up to four independent screens.	Intel® UHD Graphics. Up to four independent screens.	Intel® UHD Graphics. Up to fou independent screens.		
				Intel® Iris® Xe Graphics (80 EU)	Intel® UHD Graphics (48 EU)	Intel® Iris® Xe Graphics (80 EU)	Intel® UHD Graphics (48 EU)	Intel® UHD Graphics (32 EU)		
	Watchdog			Yes						
Operating system	Windows OS	S		Windows 10 IoT Enterprise 2021 LTSC - 64 bit						
	Drives *3	Hard Disk Drive		-						
		Solid SLC type		-						
Storage		State Drive	MLC type							
devices		Drive	3DTLC type	128 GB, 256 GB, 51	2 GB, 1 TB	128 GB, 256 GB, 51	2 GB			
	Drive bays (HDD/SSD) *1		2 CFast slot							
	Hardware-R	AID suppor	t	N/A						
	Power conn			24 VDC						
	I/O connecto	1		2 inputs and 1 output						
	USB2.0	Number o		-						
	Type-A	Maximum				_				
			cable length			_				
	USB3.0	Number o	•	4						
	Type-A	Maximum		900 mA						
			cable length							
Connectors		Number o	•	3						
	Ethernet	Physical I		10BASE-T, 100BASE-TX, 1000BASE-T or 2500BASE-T						
	connectors	Maximum transmiss between E switch an	ion distance Ethernet	100 m						
		Video inte	erface			-				
	DVI-I connector	Resolutio	n			-				
	Connector	Maximum	cable length			-				
		Maximum cable length								
	DisplayPort	Resolutio	n	Up to 4,096 x 2,304	at 60 Hz					

					1				
	Iten	n	NYP65-□1□□□	NYP13-01000	NYP65-00000	NYP13-00000	NYP3A-00000		
	RS-232C		Standard SUBD9 co	onnector (Non-Isolated)				
		Video interface			-				
	DVI-D	Resolution			-				
		Maximum cable length			_				
		Video interface	Digital only						
Optional	NY Monitor Link	Resolution	1,280 x 800 pixels at 60 Hz						
connector (select one		Connector type	RJ45						
per system)		Cable shielding, type and max. length	S/FTP, Cat.6A, 100	m					
		USB data throughput	280 Mbps max.						
	GigE LAN	Physical layer	10BASE-T, 100BASE-TX or 1000BASE-T						
	DisplayPort	Resolution	Up to 4,096 x 2,304 at 60 Hz						
	++	Maximum cable length	3 m						
	Configuratio	n	X4 (4 lanes) up to G	ien 3	N/A				
PCIe Card Slot	Card height		Standard height card mm) *2	ds, 4.20 inches (106.7	N/A				
	Card length		Half length cards, 6.	6 inches (167.65 mm)	N/A				
Dettem	Model		CJ1W-BAT01						
Battery	Service life		5 years at 25°C						
Fan unit	Model		-						
ran unit	Service life		-						
LED			PWR, ERR, HDD, RUN						

^{*1.} Depending on the model one or two drives are supported.
*2. Low profile cards, 2.536 inches (64.4 mm) are not supported.
*3. Not all combinations are possible or standard available. Please contact your Omron representative to dicuss the possibilities.

	Iten	n		NYP35-□1□□□	NYP2C-□1□□□	NYP27-□0□□□	NYP35-□0□□□	NYP2C-□0□□□	NYP2A-□0□□□			
		CPU type		Intel® Core™ i5-7300U	Intel® Celeron® 3965U	Intel® Core™ i7-7820EQ	Intel® Core™ i5-7300U	Intel® Celeron® 3965U	Intell [®] Atoml [®] x5-E3940			
		Cores / Th	reads	2/4	2/2	4/8	2/4	2/2	4/4			
			frequency	2.6 GHz	2.2 GHz	3.0 GHz	2.6 GHz	2.2 GHz	1.6 GHz			
	CPU	Maximum		3.5 GHz	_	3.7 GHz	3.5 GHz	-	1.8 GHz			
		Cache		3 MB	2 MB	8 MB	3 MB	2 MB	2 MB			
Main		Cooling d	etails	Passive cooling (fanless)	l						
system	Intel CPU category		Industrial (100%	operation minimal	10yr)							
		Memory s	ize *3	4 or 8 GB	4 or 8 GB	8, 16 or 32 GB	8 or 16 GB	4 or 8 GB	2, 4 or 8 GB			
	Memory	Memory ty	/pe	DDR4 (non ECC)				DDR3L (non ECC)			
	Trusted platf	form modul	e (TPM)	Available					•			
				Intel® HD Graphi	cs. Up to two indep	pendent screens.						
	Graphics controller			Intel [®] HD Graphics 620	Intel [®] HD Graphics 610	Intel® HD Graphics 630	Intel® HD Graphics 620	Intel® HD Graphics 610	Intel [®] HD Graphics 500			
	Watchdog			Yes								
Operating system	Windows OS			Windows 10 IoT LTSB - 64 bit Windows 10 IoT LTSC - 64 bit Windows 10 IoT LTSC - 64 bit	Enterprise 2019	Windows 10 IoT Enterprise 2019 LTSC - 64 bit Windows 10 IoT Enterprise 2021 LTSC - 64 bit	Windows 10 IoT LTSB - 64 bit Windows 10 IoT LTSC - 64 bit Windows 10 IoT LTSC - 64 bit	Enterprise 2019	Windows 10 IoT Enterprise 2019 LTSC - 64 bit Windows 10 IoT Enterprise 2021 LTSC - 64 bit			
		Hard Disk Drive		• 320 GB		N/A						
	Drives *3	Solid	SLC type	• 64 GB		N/A						
Storage devices	Dilves 43	State	MLC type	• 128 GB		• 64 GB, 128 G	B, 256 GB					
		Drive	3DTLC type	• 128 GB, 256G	B, 512 GB, 1 TB	• 128 GB, 256 G	B		-			
	Drive bays (HDD/SSD) *1			2	2	CFast slot	CFast slot	CFast slot	CFast slot			
	Power conne			24 VDC								
	I/O connector			. `	ON/OFF Input and	UPS Mode Input)	and 1 output (Pow	ver Status Output)				
	USB2.0 Number of ports		2 500 mA									
	Type-A	Maximum current Maximum cable length		5 m								
					2							
	USB3.0	USB3.0 Number of ports Maximum current			900 mA							
	Type-A	Maximum cable length		3 m								
Connectors	Ethernet	Number of ports		3								
	connectors	Physical I		10BASE-T, 100BASE-TX or 1000BASE-T								
		Video inte		Digital only								
	DVI-I	Resolutio	n	Up to 1,920 x 1,200 pixels at 60 Hz								
	connector	Maximum DVI cable	length	Dependent upon connected monitor type and resolution								
	DisplayPort	Resolutio	n	N/A								
	++	Maximum	cable length	N/A								
	RS-232C			Standard DSUB9 (Non-Isolated)	onnector	N/A						
		Video inte	rface	Digital only		N/A						
	DVI-D	Resolutio	n	Up to 1,920 x 1,2	00 pixels at 60 Hz	N/A						
0.001		Maximum DVI cable			Dependent upon connected monitor type and resolution N/A							
Optional connector		Video inte	rface	Digital only								
(select one	NY Monitor	Connecto	r type	RJ45								
per system)	Link	Cable shie and max.	elding, type length	S/FTP, Cat.6A, 1	00 m							
		USB data	throughput	280 Mbps max.								
	GigE LAN	Physical I	ayer	N/A								
	DisplayPort	Resolutio	n	N/A								
	++	Maximum	cable length	N/A								

					ı			
	Item	NYP35-□1□□□	NYP2C-□1□□□	NYP27-□0□□□	NYP35-□0□□□	NYP2C-□0□□□	NYP2A-□0□□□	
	Configuration	X2 (2 lanes) up to	o Gen 3	N/A				
PCIe Card Slot	Card height	Standard height cards, 4.20 inches (106.7 mm) *2		N/A				
	Card length	Half length cards, 6.6 inches (167.65 mm)		N/A				
Battery	Model	Non replaceable battery		CJ1W-BAT01	Non replaceable battery			
Dattery	Service life	10 years at 40°C * 4		5 years at 25°C	10 years at 40°C *4			
	Model	No fan unit		NY000-AF00	000-AF00 No fan unit			
Fan unit	Service life	-		70,000 hours of continuous operation at 40°C with 15% to 65% relative humidity				
LED		PWR, ERR, HDD, RUN						

- ***1.** Depending on the model one or two drives are supported.
- ***2.** Low profile cards, 2.536 inches (64.4 mm) are not supported.
- *3. Not all combinations are possible or standard available. Please contact your Omron representative to discuss the possibilities.
- *4. Battery service life highly depend on circumtance and is in normal operation >20yr longer

Display Specifications

		4		Specifications						
	'	tem	12.1 Inch models	15.4 Inch models	18.5 Inch models					
		Display device	TFT LCD							
		Screen size	12.1 inches	15.4 inches	18.5 inches					
		Surface treatment	Anti glare treatment	Anti glare treatment						
		Surface hardness	Mohs scale: 5 - 6							
		Resolution	1,280 × 800 pixels at 60 Hz (l	1,280 × 800 pixels at 60 Hz (horizontal × vertical)						
	Display panel	Colors	16,770,000 colors							
	*1	Effective display area	261 × 163 mm (horizontal ´vertical)	331 × 207 mm (horizontal × vertical)	409 × 230 mm (horizontal × vertical)					
Display		View angles	Left: 60°, Right: 60°, Top: 60°	Left: 89°, Right: 89°, Top: 89°, Bottom: 89°						
,		Typical LCD Brightness (initial)	1,500 cd/m ²	400 cd/m ²	500 cd/m ²					
		Life	50,000 hours min. *2							
		Brightness adjustment	200 levels *3							
		Technology	Projected capacitive							
		Touch resolution	Touch accuracy 1.5% (4-5 m	m)						
	Touch	Multi touch	Up to 5 simultaneous touches	S						
	Touch	Features	Water detection *4, hand pal	lm rejection * 5, gloves * 6						
		Life	50,000,000 operations min.							
		EMC	Correct touchscreen operatio	n is possible within allowable EM	C immunity conditions					

- *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.)
- *2. 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.

- ***3.** If the brightness is set to very dark, it causes flickering or the screen will be too dark to use. ***4.** If water is detected the touch functionality will not be available.
- ***5.** If a palm is detected that specific area is ignored.
- *6. The touchscreen can be operated when wearing gloves. Check correct usage of the gloves before using them.

Electrical Specifications

n		NYP65-01000	NYP13-01000	NYP65-00000	NYP13-□0□□□	NYP3A-□0□□□					
U typ	oe e	Intel® Core™ i5-1145GRE	Intel® Core™ i3-1115GRE	Intel [®] Core™ i5-1145GRE	Intel® Core™ i3-1115GRE	Intel® Atom® x6425RE					
ted p	ower supply voltage	24 VDC, non-isolated									
owak	ole power supply voltage range	20.4 to 28.8 VDC									
ound	ing method	Ground to less than 10	Ω 00								
ush d	current	At 24 VDC: 12 A / 6 ms max. for cold start at room temperature									
ervo	tage category	JIS B3502 and IEC 61131-2: Category II									
C im	munity level	IEC 61131-2: Zone B									
C ac	curacy	At ambient temperatur	re of 55°C: -3.5 to +0.5 re of 25°C: -1.5 to +1.5 re of 0°C: -3 to +1 min e	min error per month							
wer k	outton life	100,000 operations									
tery	life	5 years at 25°C (for ba	attery CJ1W-BAT01)								
ı life		-	-	-	-	-					
wer o	consumption *1			_							
Maximum power consumption including drives and expansions		100 W	79 W	98 W 93 W 107 W *2	77 W 72 W 86 W *2	60 W 55 W 69 W *2					
Maximum power consumption excluding drives and expansions		73 W	52 W	78 W 73 W 87 W *2	57 W 52 W 66 W *2	40 W 35 W 49 W *2					
D	rives	-									
	HDD 320 GB	2 W –									
	HDD 500 GB	2 W			_						
	HDD 1 TB	2 W			_						
	SSD SLC 32 GB			-							
	SSD SLC 64 GB										
	SSD MLC 128 GB			-							
	SSD MLC 500 GB			_							
	SSD 3DTLC 128 GB	1 W			_						
	SSD 3DTLC 256 GB	1 W			_						
	SSD 3DTLC 512 GB	2 W			_						
	SSD 3DTLC 1 TB	2 W			_						
	CFast MLC 64 GB			_							
	CFast MLC 128 GB			_							
	CFast MLC 256 GB			_							
CFast 3DTLC 128 GB CFast 3DTLC 256 GB			_	1 W							
			_	1 W							
	CFast 3DTLC 512 GB		_	2 W							
E	xpansions			_							
	USB	18 W max. (4 x 900 m	A at 5 V)								
	PCIe	5 W max.	,								

To guarantee S8BA UPS operation in combination with our IPC, the specified combination of UPS and power-supply must be used.

Ite	em	NYP65-01000	NYP13-01000	NYP65-□0□□□	NYP13-0000	NYP3A-□0□□□
Minimum power	Power supply	120 W				
requirements	UPS	120 W				

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

*1. The total power consumption is the sum of the power consumption of all items that are installed in your Industrial Box PC.

*2. The upper number is for the 12.1 inch models, the middle number is for the 15.4 inch models, and the lower number is for the 18.5 inch models.

ltem		NYP35-□1□□□	NYP2C-□1□□□	NYP27-□0□□□	NYP35-□0□□□	NYP2C-□0□□□	NYP2A-□0□□□					
CPU	type	Intel® Core™ i5-7300U	Intel® Celeron® 3965U	Intel® Core™ i7-7820EQ	Intel® Core™ i5-7300U	Intel® Celeron® 3965U	Intel® Atom® x5-E3940					
Rate	d power supply voltage	24 VDC, non-isola	ted									
Allo	wable power supply voltage range	20.4 to 28.8 VDC										
Grou	ınding method	Ground to less that	n 100 Ω									
nru	sh current	At 24 VDC: 12 A / 6 ms max. for cold start at room temperature										
Ove	voltage category	Meets IEC 61010-2-201: Category II										
MC	immunity level	IEC 61131-2: Zone B										
RTC	accuracy	At ambient temper	ature of 25°C: -1.5 t	o +0.5 min error per o +1.5 min error per 1 min error per mon	month							
ow	er button life	100,000 operation	100,000 operations									
Batt	ery life	10 years at 40°C		5 years at 25°C (for battery CJ1W-BAT01)	10 years at 40°C							
Fan life		-	-	8 years of continuous operation at 40°C	-	-	-					
ow	er consumption *1				_							
	Maximum power consumption including drives and expansions	84 W	66 W	116 W 140 W * 2	76 W 99 W * 2	58 W 80 W * 2	57 W 79 W * 2					
	Maximum power consumption excluding drives and expansions	61 W	43 W	101 W 125 W *2	61 W 84 W * 2	43 W 65 W * 2	42 W 64 W * 2					
	Drives	-										
	HDD 320 GB	2 W –										
	HDD 500 GB	2 W		-								
	HDD 1 TB	2 W		-								
	SSD SLC 32 GB	2 W				_						
	SSD SLC 64 GB	2 W		-								
	SSD MLC 128 GB	2 W		_								
	SSD MLC 500 GB				_							
	SSD 3DTLC 128 GB	1 W				_						
	SSD 3DTLC 256 GB	1 W				_						
	SSD 3DTLC 512 GB	2 W		-								
	SSD 3DTLC 1 TB	2 W				_						
	CFast MLC 64 GB		-	1 W								
	CFast MLC 128 GB		-	1 W								
	CFast MLC 256 GB		_	1 W								
	CFast 3DTLC 128 GB		_	1 W								
	CFast 3DTLC 256 GB		_	2 W								
	CFast 3DTLC 512 GB		_	2 W								
	Expansions				_							
	USB	14 W max. ((2 x 50	00 mA at 5 V) + (2 x	900 mA at 5 V))								
	PCIe	5 W max.	5 W max.			_						

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

*1. The total power consumption is the sum of the power consumption of all items that are installed in your Industrial Box PC.

*2. The upper number is for the 12.1 and 15.4 inch models, and the lower number is for the 18.5 inch models.

To guarantee S8BA UPS operation in combination with our IPC, the specified combination of UPS and power-supply must be used

Ite	Item		NYP35 / NYP2C / NYP2A		
Minimum power	Power supply	240 W	120 W		
requirements	UPS	240 W	120 W		

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 *1

DisplayPort++ *1

3 1Gbps Ethernet ports

Built-in IO

4 USB ports

Built-in SD Memory Card slot *1

LCD touchscreen

Multi-touch functionality

Up to 5 simultaneous touches are supported for complex functions.

*1.11th generation CPU: Equipped with DisplayPort++ instead of DVI, but no SD Memory Card slot.

Environmental 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.
Operation	Noise resistance (during operation)	Conforms to IEC61000-4-4, 2kV (power lines)
environment	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 60068-2-27. 147 m/s², 3 times in each X, Y and Z directions
	Installation method	Mount on panel
	Degree of protection	Front of Monitor: IP65 *3
	Pollution degree	2 or less: Meets IEC 61010-2-201.
Applicable sta	ndards *4	EU Directives: EMC Directive 2014/30/EU (EN 61131-2) and RoHS Directive KC Registration, RCM, cULus

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

- 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.

^{*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:

Storage Device Specifications

Item						Specif	ications					
Model	NY000- AS00	NY000- AS01	NY000- AS03	NY000- AS04	NY000- AS05	NY000- AS07	NY000- AS08	NY000- AS09	NY000- AS10	NY000- AS11	NY000- AS12	NY000- AS13
Capacity	32 GB	64 GB	64 GB	128 GB	500 GB	1 TB	256 GB	128 GB	256 GB	512 GB	1 TB	2 TB
Туре	SSD (SLC)		SSD (SLC)	SSD (MLC)	SSD (MLC)	SSD (3DTLC)	SSD (MLC)	SSD (3DTLC)	SSD (3DTLC)	SSD (3DTLC)	SSD (3DTLC)	SSD (3DTLC)
S.M.A.R.T. support	Yes	es										
Rotation speed	-	-	_	-	-	_	_	-	_	-	-	-
Interface	Serial ATA	Serial ATA 3.1										
Sustained standard read speed	Up to 160 MB/s	Up to 160 MB/s	Up to 500 MB/s	Up to 530 MB/s	Up to 415 MB/s	Up to 550 MB/s	Up to 530 MB/s	Up to 550 MB/s	Up to 550 MB/s	Up to 550 MB/s	Up to 550 MB/s	Up to 550 MB/s
Sustained standard write speed	Up to 145 MB/s	Up to 150 MB/s	Up to 370 MB/s	Up to 190 MB/s	Up to 200 MB/s	Up to 340 MB/s	Up to 210 MB/s	Up to 450 MB/s	Up to 485 MB/s	Up to 500 MB/s	Up to 510 MB/s	Up to 510 MB/s
Operating temperature	0 to 70°C		1			•	•			1		
Operating humidity	10% to 95% (with no co		10% to 85% (with no condensati on)	10% to 95% (with no co				5% to 90% (with no condensation)				
Storage temperature	-40 to 100°C -45 to 90°C -55 to 95°C					-40 to 85°C	:					
Storage humidity	10% to 95%	6 (with no co	ndensation)					5% to 93% (with no condensation)				
Life	1,500 TB written	3,000 TB written	1900 TB written	208 TB written	154 TB written	1000 TB written	416 TB written	90 TB written	230 TB written	550 TB written	1200 TB written	3000 TB written

Item					Specifications					
Model	NY000-AH00 *1	NY000-AH01 *1	NY000- AH02 * 1	NY000-AT00	NY000-AT01	NY000-AT02	NY000-AT05	NY000-AT06	NY000-AT07	
Capacity	320 GB	500 GB	1 TB	64 GB	128 GB	256 GB	128 GB	256 GB	512 GB	
Туре	HDD	HDD	HDD	CFast (MLC)	CFast (MLC)	CFast (MLC)	CFast (3DTLC)	CFast (3DTLC)	CFast (3DTLC)	
S.M.A.R.T. support	Yes									
Rotation speed	5,400 r/min			-	_	_	-	-	_	
Interface	Serial ATA 3.0			Serial ATA 3.1						
Sustained standard read speed	-	_	_	Up to 530 MB/s	Up to 530 MB/s	Up to 530 MB/s	Up to 550 MB/s	Up to 550 MB/s	Up to 550 MB/s	
Sustained standard write speed	-	-	_	Up to 100 MB/s	Up to 190 MB/s	Up to 210 MB/s	Up to 450 MB/s	Up to 485 MB/s	Up to 500 MB/s	
Operating temperature	5 to 55°C	5 to 55°C	0 to 60°C	-40 to 85°C						
Operating humidity	8% to 90% (with no conder	nsation)		10% to 95% (with no conder	nsation)		5% to 90% (with no conden	sation)		
Storage temperature	-40 to 65°C			-55 to 95°C	-40 to 8			o 85°C		
Storage humidity	8% to 90% (with no conder	nsation)	5% to 95% (with no condensation)	10% to 95% (with no conder	nsation)		5% to 90% (with no condensation)			
Life	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 106 seeks/month Average Annualized Failure Rate (AFR): 0.50% Under the following conditions: • Case Temperatur e 40°C • Power on Hours (POH) ≤ 3120		125 TB written	208 TB written	417 TB written	90 TB written	230 TB written	550 TB written		

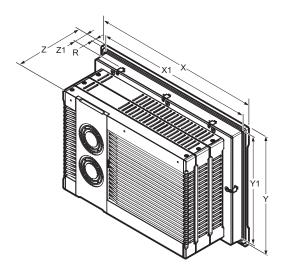
Note: Orders for NY000-AS02 are no longer accepted, as of November 30, 2018.

*1. For a Panel PC with an HDD: this device can only be installed in a vibration free environment only. (NYP)

*2. Powered-ON hours include sleep and standby modes.

^{*3.} Operation includes seeking, writing, and reading functions.

Dimensions



		Panel		
		12.1 Inch		
Item	NYP35-□1□□□ NYP2C-□1□□□	NYP27-□0□□□	NYP35- 0	
Panel preparation dimensions	Cutout Width X1 = 314 ⁻⁰ +1 mm Cutout Height Y1 = 216 ⁻⁰ +1 mm			
Panel thickness range *	Panel thickness range Z1 = 1.6 to 6.0	mm		
Dimensions	Width X = 332 mm Height Y = 234 mm Depth Z = 105 mm	Width X = 332 mm Height Y = 234 mm Depth Z = 88 mm	Width X = 332 mm Height Y = 234 mm Depth Z = 73 mm	
Monitor thickness in front of panel	Rim thickness R = 8.0 mm			
Weight	5.6 kg	5.1 kg	4.7 kg	

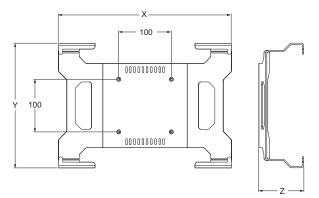
	Panel				
	15.4 Inch				
Item	NYP35-□1□□□ NYP2C-□1□□□ NYP65-□1□□□ NYP13-□1□□□	NYP27-□0□□□	NYP35-00-0-0 NYP2C-00-0-0 NYP2A-00-0-0 NYP65-00-0-0 NYP13-00-0-0 NYP3A-00-0-0		
Panel preparation dimensions	Cutout Width X1 = 383 ⁻⁰⁺¹ mm Cutout Height Y1 = 259 ⁻⁰⁺¹ mm				
Panel thickness range *	Panel thickness range Z1 = 1.6 to 6.0 mm				
Dimensions	Height Y = 277 mm Height Y = 277 mm Height Y		Width X = 401 mm Height Y = 277 mm Depth Z = 73 mm		
Monitor thickness in front of panel	Rim thickness R = 8.0 mm				
Weight	6.6 kg	6.0 kg 5.6 kg			

	Panel			
	18.5 Inch			
Item	NYP27-□0□□□	NYP35-00-0- NYP2C00-0- NYP2A00-0- NYP6500-0-0 NYP1300-0-0 NYP3A00-0-0		
Panel preparation dimensions	Cutout Width X1 = 463 ^{-0 +1} mm Cutout Height Y1 = 285 ^{-0 +1} mm			
Panel thickness range *	Panel thickness range Z1 = 1.6 to 6.0 mm			
Dimensions	Width X = 482 mm Height Y = 304 mm Depth Z = 88 mm	Width X = 482 mm Height Y = 304 mm Depth Z = 73 mm		
Monitor thickness in front of panel	Rim thickness R = 8.0 mm			
Weight	7.0 kg	6.6 kg		

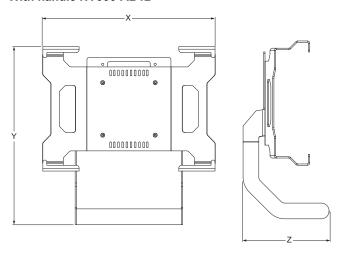
^{*} The minimum panel thickness depends on the panel material.

Bracket Specifications

Without handle



With handle NY000-AB12



	Bracket type Bracket ID		Without handle		With handle NY000-AB12			
Model		Bracket ID	Bracket width X	Bracket height Y	Bracket depth Z	Bracket width X	Bracket height Y	Bracket depth Z
NYP35-□0□□-12WC NYP2C-□0□□-12WC NYP2A-□0□□-12WC NYP65-□0□□-12WC NYP13-□0□□-12WC NYP13-□0□□-12WC	Vesa mount	NY000-AB06	328 mm	237 mm	86 mm	328 mm	339 mm	164 mm
NYP35-0000-15WC NYP2C-0000-15WC NYP2A-0000-15WC NYP65-0000-15WC NYP13-0000-15WC NYP13-0000-15WC	Vesa mount	NY000-AB07	397 mm	280 mm	86 mm	397 mm	381 mm	164 mm
NYP35-0000-1-19WC NYP2C-0000-1-19WC NYP2A-0000-1-19WC NYP65-0000-1-19WC NYP13-0000-1-19WC NYP3A-0000-1-19WC	Vesa mount	NY000-AB08	478 mm	306 mm	83 mm	478 mm	409 mm	164 mm
NYP35-□1□□□-12WC NYP2C-□1□□□-12WC NYP27-□0□□□-12WC	Vesa mount	NY000-AB09	328 mm	237 mm	118 mm	328 mm	339 mm	164 mm
NYP35	Vesa mount	NY000-AB10	397 mm	280 mm	118 mm	397 mm	381 mm	164 mm
NYP27-□0□□□-19WC	Vesa mount	NY000-AB11	478 mm	306 mm	98 mm	478 mm	409 mm	164 mm

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	NYB1E	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	NYM19W-C1	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	NYP27	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		
NY-series Operating Systems and Software Utilities Manual	W616	NYB 0 NYB 1 NYB 2 NYB 3 NYB 4 NYB 5 NYP 0 NYP 1 NYP 2 NYP 3 NYP 3 NYP 3	Learning all software related information about the Industrial Box PC. This includes introductory information, installation, operating procedures and maintenance. Mainly software information is provided.	An introduction to the Box PC is provided along with the following information: Overview Software Specifications Installation Operating Procedures Maintenance		