

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
- Optional NY Monitor Link interface for connectivity up to 100 m
- 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.

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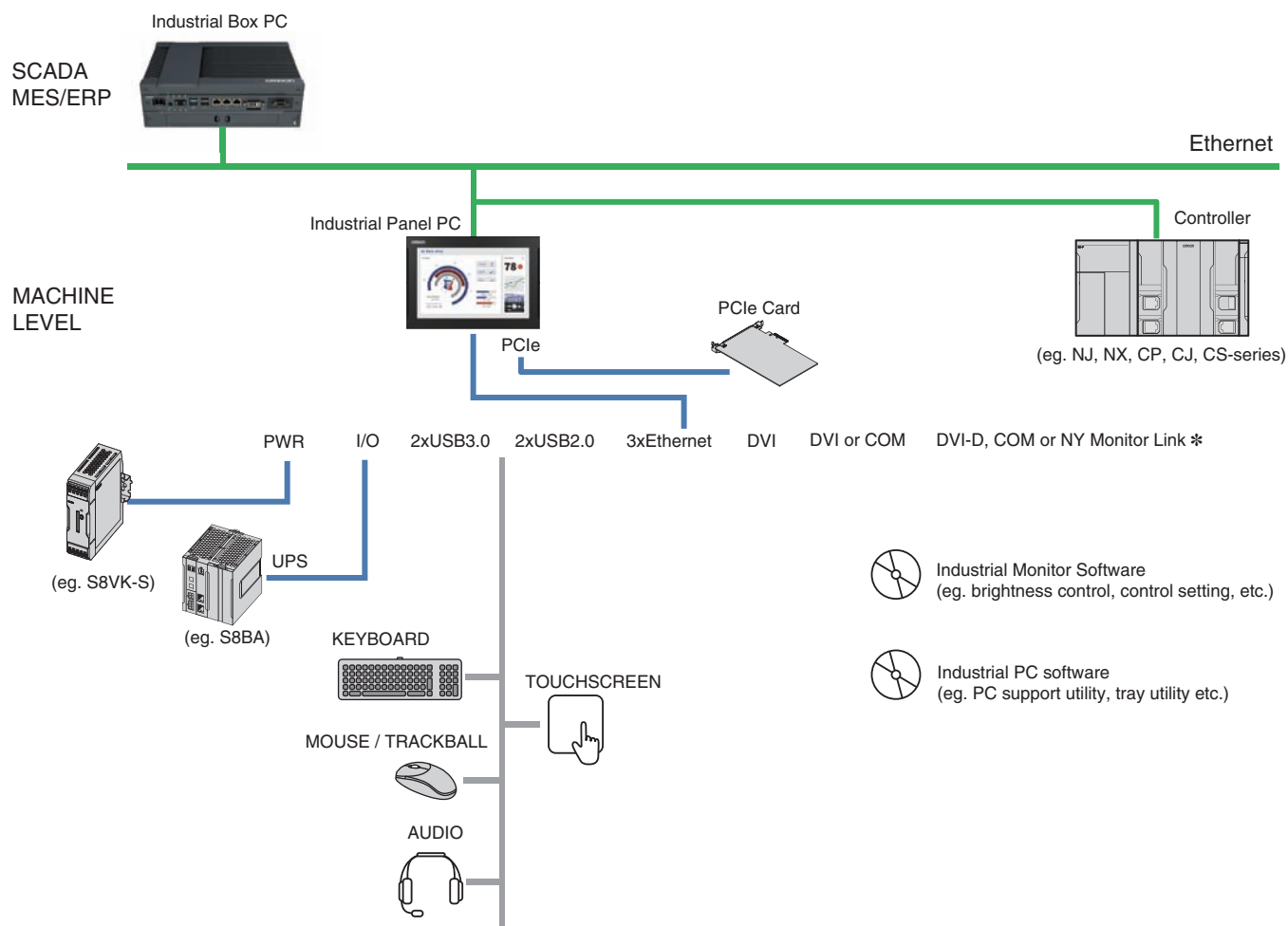
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System Configuration



* NY Monitor Link option: Connect monitor up to 100 m via standard 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	17: Intel® Core™ i7-4700EQ4th generation CPU with fan unit for active cooling 25: Intel® Core™ i5-4300U4th generation CPU with fanless cooling 1C: Intel® Celeron® 2980U4th generation CPU with fanless cooling 35: Intel® Core™ i5-7300U7th generation CPU with fanless cooling 2C: Intel® Celeron® 3965U7th generation CPU with fanless cooling 2A: Intel® Atom® Apollo Lake x5-E3940 Processor
3	Main memory	1: 2 GB, non-ECC 2: 4 GB, non-ECC 3: 8 GB, non-ECC 4: 16 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 1: Windows Embedded Standard 7 - 32 bit 2: Windows Embedded Standard 7 - 64 bit 3: Windows 10 IoT Enterprise 2016 LTSC - 64 bit 4: Windows 10 IoT Enterprise 2019 LTSC - 64bit
6	Storage	0: No disk 5: 64 GB, CFast MLC 6: 128 GB, CFast MLC 7: 256 GB, CFast MLC 8: 32 GB, SSD SLC 9: 64 GB, SSD SLC C: 320 GB, HDD D: 500 GB, HDD E: 1 TB, HDD K: 128 GB, SSD MLC
7	Optional interface	0: No optional interface 1: RS-232C 2: DVI-D 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	Specifications							Model
	Display size	Operating system	CPU type	RAM memory (non-ECC type)	Storage size	Interface option	PCIe-slot	
Industrial Panel PC	12.1 Inch	Windows 10 IoT Enterprise 2016 LTSB - 64 bit	Intel® Core™ i7-4700EQ	8 GB	128 GB SSD type (MLC)	RS-232C	Yes	NYP17-313K1-12WC1000
			Intel® Core™ i5-7300U	8 GB	64 GB SSD type (SLC)	No	No	NYP35-30370-12WC1000
			Intel® Celeron™ 3965U	8 GB	128 GB SSD type (MLC)	No	No	NYP2C-30370-12WC1000
		Windows 10 IoT Enterprise 2019 LTSC - 64bit	Intel® Atom® x5-E3940 Processor	4 GB	128 GB CFast type (MLC)	No	No	NYP2A-20460-12WC1000
	15.4 Inch	Windows 10 IoT Enterprise 2016 LTSB - 64 bit	Intel® Core™ i7-4700EQ	8 GB	128 GB SSD type (MLC)	RS-232C	Yes	NYP17-313K1-15WC1000
			Intel® Core™ i5-7300U	8 GB	64 GB SSD type (SLC)	No	No	NYP35-30370-15WC1000
			Intel® Celeron™ 3965U	8 GB	128 GB SSD type (MLC)	No	No	NYP2C-30370-15WC1000
		Windows 10 IoT Enterprise 2019 LTSC - 64bit	Intel® Atom® x5-E3940 Processor	4 GB	128 GB CFast type (MLC)	No	No	NYP2A-20460-15WC1000
	18.5 Inch *	Windows 10 IoT Enterprise 2016 LTSB - 64 bit	Intel® Core™ i5-7300U	8 GB	64 GB SSD type (SLC)	No	No	NYP35-30370-19WC1000
			Intel® Celeron™ 3965U	8 GB	128 GB SSD type (MLC)	No	No	NYP2C-30370-19WC1000
		Windows 10 IoT Enterprise 2019 LTSC - 64bit	Intel® Atom® x5-E3940 Processor	4 GB	128 GB CFast type (MLC)	No	No	NYP2A-20460-19WC1000

* 18.5 inch models also available with Nickel Plating front.

Accessories

Optional Hardware

Product name	Specifications	Model
SD Memory Cards	Card type: SD Card Capacity: 2 GB Format: FAT16	HMC-SD291
	Card type: SDHC Card Capacity: 4 GB Format: FAT32	HMC-SD491
USB Flash Drives	Capacity: 2 GB	FZ-MEM2G
	Capacity: 8 GB	FZ-MEM8G
Storage Devices *1	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	NY000-AS01
	Storage type: SSD SLC (Hagiwara) Capacity: 64 GB	NY000-AS03
	Storage type: SSD MLC (Innodisk) Capacity: 128 GB	NY000-AS04
	Storage type: SSD MLC Capacity: 500 GB	NY000-AS05
	Storage type: CFast MLC Capacity: 64 GB	NY000-AT00
	Storage type: CFast MLC Capacity: 128 GB	NY000-AT01
	Storage type: CFast MLC Capacity: 256 GB	NY000-AT02
USB Type-A to USB Type-B Cables	Cable length: 2 m USB 2.0 Minimum bend radius: 25 mm	FH-VUAB 2M
	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
	Cable length: 5 m Supports DVI-D Minimum bend radius: 36 mm	NY000-AC00 5M
Power Supply	<ul style="list-style-type: none"> Output voltage: 24 VDC Push-In Plus terminal blocks 	S8VK-S□□□24
UPS *2	Output voltage during backup operation: 24 VDC ± 5%	S8BA
UPS Communication Cable	Cable length: 2 m Signals for <ul style="list-style-type: none"> 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. CFast Storage can be used only with the NYP35-□0, NYP2C-□0. Please contact your Omron representative to discuss the possibilities.

*2. 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.

A3□ □□□□□□□□ □□ □
 1 2 3 4

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 accessories supplied with Industrial Panel PC. <ul style="list-style-type: none"> • 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

* 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.
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
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 performed 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

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 drive necessary for installation	1 GB or more
Optical disk drive	DVD-ROM drive
Communication port	USB
	LAN
	USB2.0 Type-A x 2 *1
	Ethernet x 2 *1

*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

Item				NYP17- □□□□□	NYP25- □□□□□ *4	NYP1C- □□□□□ *4	NYP35- □1□□□	NYP2C- □1□□□	NYP35- □0□□□	NYP2C- □0□□□	NYP2A- □0□□□						
Main system	CPU	CPU type		Intel® Core™ i7-4700EQ	Intel® Core™ i5-4300U	Intel® Celeron® Processor 2980U	Intel® Core™ i5-7300U	Intel® Celeron® Processor 3965U	Intel® Core™ i5-7300U	Intel® Celeron® Processor 3965U	Intel® Atom® Processor x5-E3940						
		Cores / Threads		4 / 8	2 / 4	2 / 2	2 / 4	2 / 2	2 / 4	2 / 2	4 / 4						
		CPU base frequency		2.4 GHz	1.9 GHz	1.6 GHz	2.6 GHz	2.2 GHz	2.6 GHz	2.2 GHz	1.6 GHz						
		Maximum turbo frequency		3.4 GHz	2.9 GHz	–	3.5 GHz	–	3.5 GHz	–	1.8 GHz						
		Cache		6 MB	3 MB	2 MB	3 MB	2 MB	3 MB	2 MB	2 MB						
		Cooling details		Requires active cooling (fan)	Passive cooling (fanless)												
	Memory	Memory size *3		4, 8 or 16 GB	2, 4 or 8 GB	2, 4 or 8 GB	4 or 8 GB	4 or 8 GB	8 or 16 GB	4 or 8 GB	2, 4 or 8 GB						
		Memory type		DDR3L (non ECC)			DDR4 (non ECC)		DDR4 (non ECC)		DDR3L (non ECC)						
	Trusted platform module (TPM)		Available														
	Graphics controller		Intel® HD Graphics. Up to two independent screens.														
Intel® HD Graphics 4600			Intel® HD Graphics 4400		Intel® HD Graphics		Intel® HD Graphics 620		Intel® HD Graphics 610		Intel® HD Graphics 620		Intel® HD Graphics 610		Intel® HD Graphics 500		
Watchdog		Yes															
Operating system	Windows OS		Windows Embedded Standard 7 - 32 bit Windows Embedded Standard 7 - 64 bit Windows 10 IoT Enterprise 2016 LTSC - 64 bit				Windows 10 IoT Enterprise 2016 LTSC - 64 bit		Windows 10 IoT Enterprise 2016 LTSC - 64 bit		Windows 10 IoT Enterprise 2019 LTSC - 64 bit						
Storage devices	Drives *3	Hard Disk Drive		• 320 GB, 500 GB, 1 TB Serial ATA 3.0		• 320 GB Serial ATA 3.0		• 320 GB Serial ATA 3.0		N/A							
		Solid State Drive	SLC type		• 32 GB and 64 GB Serial ATA 3.1				• 64 GB Serial ATA 3.1		N/A						
			MLC type		• 128 GB Serial ATA 3.1				• 64 GB, 128 GB, 256 GB Serial ATA 3.1								
	Drive bays (HDD/SSD) *1		2		2		1		2		2		CFAST slot		CFAST slot		CFAST slot
Connectors	Power connector		24 VDC														
	I/O connector		2 inputs (Power ON/OFF Input and UPS Mode Input) and 1 output (Power Status Output)														
	USB2.0 Type-A	Number of ports		2													
		Maximum current		500 mA													
		Maximum cable length		5 m													
	USB3.0 Type-A	Number of ports		2													
		Maximum current		900 mA													
		Maximum cable length		3 m													
	Ethernet connectors	Number of ports		3													
		Physical layer		10BASE-T, 100BASE-TX or 1000BASE-T													
	DVI-I connector	Video interface		Digital or analog		Digital only											
		Resolution		Up to 1,920 x 1,200 pixels at 60 Hz													
Maximum DVI cable length		Dependent upon connected monitor type and resolution															
Optional connector (select one per system)	RS-232C		Standard DSUB9 connector (Non-Isolated)							N/A							
	DVI-D	Video interface		Digital only							N/A						
		Resolution		Up to 1,920 x 1,200 pixels at 60 Hz							N/A						
		Maximum DVI cable length		Dependent upon connected monitor type and resolution							N/A						
	NY Monitor Link	Video interface		Digital only													
		Resolution		1,280 x 800 pixels at 60 Hz													
		Connector type		RJ45													
		Cable shielding, type and max. length		S/FTP, Cat.6A, 100 m													
USB data throughput		280 Mbps max.															

Item		NYP17- □□□□□	NYP25- □□□□□ ※4	NYP1C- □□□□□ ※4	NYP35- □1□□□	NYP2C- □1□□□	NYP35- □0□□□	NYP2C- □0□□□	NYP2A- □0□□□
PCIe Card Slot	Configuration	X4 (4 lanes) up to Gen 3	X1 (1 lane) up to Gen 2		X2 (2 lanes) up to Gen 3		N/A		
	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	CJ1W-BAT01			Non replaceable battery				
	Service life	5 years at 25°C			10 years at 40°C				
Fan unit	Model	NY000-AF00	No 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. Not recommended for new projects.

Display Specifications

Item			Specifications		
			12.1 Inch models	15.4 Inch models	18.5 Inch models
Display	Display panel *1	Display device	TFT LCD		
		Screen size	12.1 inches	15.4 inches	18.5 inches
		Surface treatment	Anti glare treatment		
		Surface hardness	Mohs scale: 5 - 6		
		Resolution	1,280 ?800 pixels at 60 Hz (horizontal ?vertical)		1,920 ?1,080 pixels at 60 Hz (horizontal ?vertical)
		Colors	16,770,000 colors		
		Effective display area	261 ?163 mm (horizontal ?vertical)	331 ?207 mm (horizontal ?vertical)	409 ?230 mm (horizontal ?vertical)
		View angles	Left: 60°, Right: 60°, Top: 60°, Bottom: 60°		Left: 89°, Right: 89°, Top: 89°, Bottom: 89°
		Life	50,000 hours min. *2		
		Brightness adjustment	200 levels *3		
	Touch	Technology	Projected capacitive		
		Touch resolution	Touch accuracy 1.5% (4-5 mm)		
		Multitouch	Up to 5 simultaneous touches		
		Features	Water detection *4, hand palm rejection *5, gloves *6		
		Life	50,000,000 operations min.		
		EMC	Correct touchscreen operation is possible within allowable EMC 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 neglected.

*6. The touchscreen can be operated when wearing gloves. Check correct usage of the gloves before using them.

Electrical Specifications

Item	NYP17- □□□□□	NYP25- □□□□□	NYP1C- □□□□□	NYP35- □1□□□	NYP2C- □1□□□	NYP35- □0□□□	NYP2C- □0□□□	NYP2A- □0□□□
CPU type	Intel® Core™ i7-4700EQ CPU	Intel® Core™ i5-4300U CPU	Intel® Celeron® 2980U CPU	Intel® Core™ i5-7300U	Intel® Celeron® Processor 3965U	Intel® Core™ i5-7300U	Intel® Celeron® Processor 3965U	Intel® Atom® Processor x5-E3940
Rated power supply voltage	24 VDC, non-isolated							
Allowable power supply voltage range	20.4 to 28.8 VDC							
Grounding method	Ground to less than 100 Ω							
Inrush current	At 24 VDC: 12 A / 6 ms max. for cold start at room temperature							
Overvoltage category	Meets IEC 61010-2-201: Category II							
EMC immunity level	IEC 61131-2: Zone B							
RTC accuracy	At ambient temperature of 55°C: -3.5 to +0.5 min error per month At ambient temperature of 25°C: -1.5 to +1.5 min error per month At ambient temperature of 0°C: -3 to +1 min error per month							
Power button life	100,000 operations							
Battery life	5 years at 25°C (for battery CJ1W-BAT01)				10 years at 40°C			
Fan life	8 years of continuous operation at 40°C	—	—	—	—	—	—	—
Power consumption *1	—							
Maximum power consumption including drives and expansions	132 W	93 W	84 W	84 W	66 W	61 W 84 W *2	58 W 80 W *2	57 W 79 W *2
Maximum power consumption excluding drives and expansions	99 W	70 W	63 W	61 W	43 W	76 W 99 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	3 W						—	
CFast MLC 64 GB			—			1 W		
CFast MLC 128 GB			—			1 W		
CFast MLC 256 GB			—			1 W		
Expansions	—							
USB	14 W max. ((2 x 500 mA at 5 V) + (2 x 900 mA at 5 V))							
PCIe	15 W max.	5 W max.	5 W max.	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

Item		NYP17	NYP25 / NYP1C / NYP35 / NYP2C / NYP2A
Minimum power requirements	Power supply	240 W	120 W
	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

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.

Environmental Specifications

Item		Specifications
Operation environment	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): <ul style="list-style-type: none"> 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/s ² , 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 standards *4		EU Directives: EMC Directive 2014/30/EU (EN 61131-2) and RoHS Directive KC Registration, RCM, cULus, EAC

*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-AS03	NY000-AS04	NY000-AS05	NY000-AH00*1	NY000-AH01*1	NY000-AH02*1	NY000-AT00	NY000-AT01	NY000-AT02
Capacity	32 GB	64 GB	64 GB	128 GB	500 GB	320 GB	500 GB	1 TB	64 GB	128 GB	256 GB
Type	SSD (SLC)		SSD (SLC)	SSD (MLC)	SSD (MLC)	HDD	HDD	HDD	CFast (MLC)	CFast (MLC)	CFast (MLC)
S.M.A.R.T. support	Yes										
Rotation speed	-	-	-	-	-	5,400 r/min			-	-	-
Interface	Serial ATA 3.1					Serial ATA 3.0			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 530 MB/s	Up to 530 MB/s	Up to 530 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 100 MB/s	Up to 190 MB/s	Up to 210 MB/s
Operating temperature	0 to 70°C					5 to 55°C	5 to 55°C	0 to 60°C	-40 to 85°C		
Operating humidity	10% to 95% (with no condensation)		10% to 85% (with no condensation)	10% to 95% (with no condensation)		8% to 90% (with no condensation)			10% to 95% (with no condensation)		
Storage temperature	-40 to 100°C		-45 to 90°C	-55 to 95°C	-55 to 95°C	-40 to 65°C			-55 to 95°C		
Storage humidity	10% to 95% (with no condensation)					8% to 90% (with no condensation)		5% to 95% (with no condensation)	10% to 95% (with no condensation)		
Life	1,500 TB written	3,000 TB written	1900 TB written	208 TB written	154 TB written	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		Average Annualized Failure Rate (AFR): 0.50% Under the following conditions: • Case Temperature 40°C • Power on Hours (POH) ≤ 3120	125 TB written	208 TB written	417 TB written

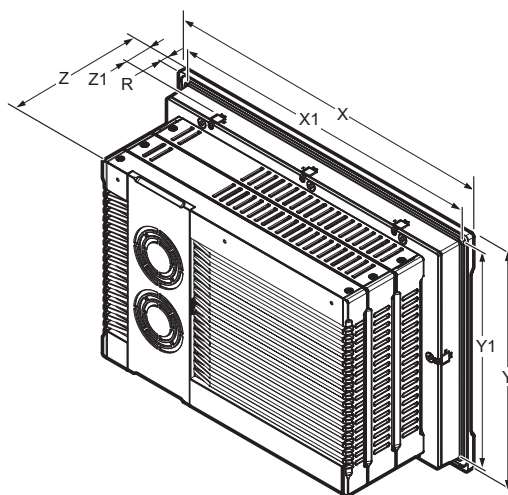
Note: Orders for NY000-AS02 are no longer accepted, as of November 30, 2018.

*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



Item	Panel						
	12.1 Inch			15.4 Inch			18.5 Inch
	NYP17-□□□□ NYP25-□□□□ NYP1C-□□□□	NYP35-□1□□ NYP2C-□1□□	NYP35-□0□□ NYP2C-□0□□ NYP2A-□0□□	NYP17-□□□□ NYP25-□□□□ NYP1C-□□□□	NYP35-□1□□ NYP2C-□1□□	NYP35-□0□□ NYP2C-□0□□ NYP2A-□0□□	NYP35-□0□□ NYP2C-□0□□ NYP2A-□0□□
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			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			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 = 332 mm Height Y = 234 mm Depth Z = 105 mm	Width X = 332 mm Height Y = 234 mm Depth Z = 71 mm	Width X = 401 mm Height Y = 277 mm Depth Z = 121 mm	Width X = 401 mm Height Y = 277 mm Depth Z = 105 mm	Width X = 401 mm Height Y = 277 mm Depth Z = 71 mm	Width X = 481 mm Height Y = 303 mm Depth Z = 71 mm
Monitor thickness in front of panel	Rim thickness R = 8.0 mm			Rim thickness R = 8.0 mm			
Weight	6.1 kg	5.6 kg	4.7 kg	7.2 kg	6.6 kg	5.6 kg	6.6 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	NYB1E-□1□□□ NYB17-□1□□□ NYB25-□1□□□ NYB1C-□1□□□ NYB35-□□□□□ NYB2C-□□□□□	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: <ul style="list-style-type: none"> • Overview • Hardware • Software • Specifications • Installation • Operating Procedures • Maintenance
NY-Series Industrial Box-PC without OS User's Manual	W586	NYB1E-□1□□□ NYB17-□10□□ NYB25-□10□□ NYB1C-□10□□ NYB35-□□0□□ NYB2C-□□0□□	Learning about the Omron Industrial PC functionality without an installed Operating System	An introduction to the Industrial Box PC is provided along with the following information: <ul style="list-style-type: none"> • Overview • Hardware • Software • Specifications • Installation • Operating Procedures • Maintenance
Industrial Monitor User's Manual	W554	NYM19W-C1□□□ NYM15WC10□□ NYM12WC10□□	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: <ul style="list-style-type: none"> • Overview • Hardware • Software • Specifications • Installation • Operating Procedures • Maintenance
Industrial Panel PC User's Manual	W555	NYP17-□1□□□-15WC100□ NYP17-□1□□□-12WC100□ NYP25-□1□□□-15WC100□ NYP25-□1□□□-12WC100□ NYP1C-□1□□□-15WC100□ NYP1C-□1□□□-12WC100□ NYP35-□□□□□-15WC100□ NYP35-□□□□□-12WC100□ NYP2C-□□□□□-15WC100□ NYP2C-□□□□□-12WC100□ NYP35-□0□□□-19WC1□0□ NYP2C-□0□□□-19WC1□0□	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: <ul style="list-style-type: none"> • Overview • Hardware • Software • Specifications • Installation • Operating Procedures • Maintenance
NY-Series Industrial Panel-PC without OS User's Manual	W587	NYP17-□10□□-15WC100□ NYP17-□10□□-12WC100□ NYP25-□10□□-15WC100□ NYP25-□10□□-12WC100□ NYP1C-□10□□-15WC100□ NYP1C-□10□□-12WC100□ NYP35-□□0□□-15WC100□ NYP35-□□0□□-12WC100□ NYP2C-□□0□□-15WC100□ NYP2C-□□0□□-12WC100□ NYP35-□0□□□-19WC1□0□ NYP2C-□0□□□-19WC1□0□	Learning about the Omron Industrial PC functionality without an installed Operating System	An introduction to the Industrial Panel PC is provided along with the following information: <ul style="list-style-type: none"> • 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: <ul style="list-style-type: none"> • Overview • Preparation • Installation and Connection • Check and Start Operation • Maintenance and Inspection • Shutdown Processing • I/O Signal Functions • Troubleshooting

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