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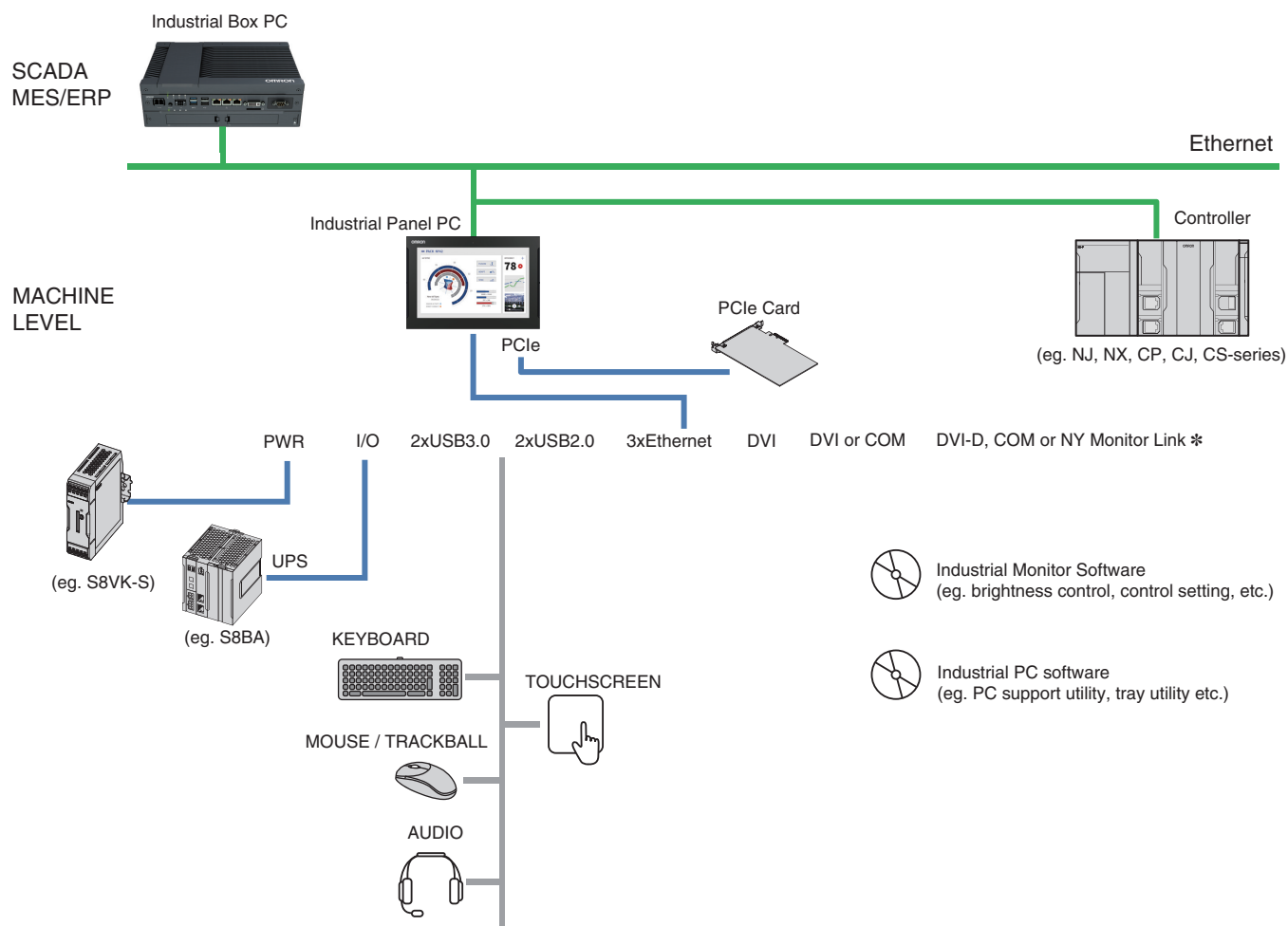The SD and SDHC logos are trademarks of SD-3C, LLC.
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System Configuration

Industrial Box PC

SCADA
MES/ERP

Ethernet

Industrial Panel PC

MACHINE
LEVEL

PCIe Card

Controller

(eg. NJ, NX, CP, CJ, CS-series)

PCIe

PWR   I/O   2xUSB3.0   2xUSB2.0   3xEthernet   DVI   DVI or COM   DVI-D, COM or NY Monitor Link ✲

(eg. S8VK-S)

UPS

Industrial Monitor Software
(eg. brightness control, control setting, etc.)

(eg. S8BA)

KEYBOARD

Industrial PC software
(eg. PC support utility, tray utility etc.)

TOUCHSCREEN

MOUSE / TRACKBALL

AUDIO

✲ 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 2C: Intel® Celeron® 3965U 7th generation CPU with fanless cooling 2A: Intel® Atom® x5-E3940
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 C: 8 GB, ECC D: 16 GB, ECC E: 32 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 F: Windows 10 IoT Enterprise 2019 LTSC - 64 bit + FH software
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 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 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™ i5-7300U	8 GB	256 GB CFast type (MLC)	No	No	**NYP35-30370-12WC1000**
			Intel®Celeron™ 3965U	8 GB	256 GB CFast type (MLC)	No	No	**NYP2C-30370-12WC1000**
		Windows 10 IoT Enterprise 2019 LTSC - 64bit	Intel® Core™ i7-7820EQ	8 GB	128 GB CFast type (MLC)	No	No	**NYP27-30460-12WC1000**
			Intel® Atom® x5-E3940	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™ i5-7300U	8 GB	256 GB CFast type (MLC)	No	No	**NYP35-30370-15WC1000**
			Intel®Celeron™ 3965U	8 GB	256 GB CFast type (MLC)	No	No	**NYP2C-30370-15WC1000**
		Windows 10 IoT Enterprise 2019 LTSC - 64bit	Intel® Core™ i7-7820EQ	8 GB	128 GB CFast type (MLC)	No	No	**NYP27-30460-15WC1000**
			Intel® Atom® x5-E3940	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	256 GB CFast type (MLC)	No	No	**NYP35-30370-19WC1000**
			Intel®Celeron™ 3965U	8 GB	256 GB CFast type (MLC)	No	No	**NYP2C-30370-19WC1000**
		Windows 10 IoT Enterprise 2019 LTSC - 64bit	Intel® Core™ i7-7820EQ	8 GB	128 GB CFast type (MLC)	No	No	**NYP27-30460-19WC1000**
			Intel® Atom® x5-E3940	4 GB	128 GB CFast type (MLC)	No	No	**NYP2A-20460-19WC1000**

✱ 18.5 inch models also available with Nickel Plating front.

Kreski
Zapraszamy do kontaktu!
Więcej informacji: www.kreski.pl

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
	Card type: SDHC Card Capacity: 16 GB Format: FAT32	HMC-SD1A1
USB Flash Drives	Capacity: 2 GB	FZ-MEM2G
	Capacity: 8 GB	FZ-MEM8G
Storage Devices	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: SSD 3DTLC Capacity: 1 TB	NY000-AS07
	Storage type: SSD MLC (Innodisk) Capacity: 256 GB	NY000-AS08
	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
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	• Output voltage: 24 VDC • Push-In Plus terminal blocks	S8VK-G□□□24
	• 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
UPS ∗1	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. 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 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
	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.
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 perfoemed 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	USB2.0 Type-A x 2 ∗1
	LAN	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	NYP35-□1□□□	NYP2C-□1□□□	NYP27-□0□□□	NYP35-□0□□□	NYP2C-□0□□□	NYP2A-□0□□□
Main system	CPU	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 / Threads	2 / 4	2 / 2	4 / 8	2 / 4	2 / 2	4 / 4
		CPU base frequency	2.6 GHz	2.2 GHz	3.0 GHz	2.6 GHz	2.2 GHz	1.6 GHz
		Maximum turbo frequency	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
		Cooling details	Passive cooling (fanless)		Requires active cooling (fan)	Passive cooling (fanless)		
		Intel CPU category	Industrial (100% operation minimal 10yr)					
	Memory	Memory size *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 type	DDR4 (non ECC)					DDR3L (non ECC)
	Trusted platform module (TPM)		Available					
	Graphics controller		Intel® HD Graphics. Up to two independent screens.					
			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 Enterprise 2016 LTSB - 64 bit		Windows 10 IoT Enterprise 2019 LTSC - 64 bit	Windows 10 IoT Enterprise 2016 LTSB - 64 bit		Windows 10 IoT Enterprise 2019 LTSC - 64 bit
Storage devices	Drives *3	Hard Disk Drive	• 320 GB Serial ATA 3.0		N/A			
		Solid State Drive — SLC type	• 64 GB Serial ATA 3.1		N/A			
		Solid State Drive — MLC type	• 128 GB Serial ATA 3.1		• 64 GB, 128 GB, 256 GB Serial ATA 3.1, CFast			
	Drive bays (HDD/SSD) *1		2	2	CFast slot	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 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					
		Connector type	RJ45					
		Cable shielding, type and max. length	S/FTP, Cat.6A, 100 m					
		USB data throughput	280 Mbps max.					
	GigE LAN	Physical layer	N/A					

Item		NYP35-☐1☐☐☐	NYP2C-☐1☐☐☐	NYP27-☐0☐☐☐	NYP35-☐0☐☐☐	NYP2C-☐0☐☐☐	NYP2A-☐0☐☐☐
PCIe Card Slot	Configuration	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	Non replaceable battery		CJ1W-BAT01	Non replaceable battery		
	Service life	10 years at 40°C ✳4		5 years at 25°C	10 years at 40°C ✳4		
Fan unit	Model	No fan unit		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.** Battery service life highly depend on circumtance and is in normal operation >20yr longer

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°
		Typical LCD Brightness (initial)	1,500 cd/m²	400 cd/m²	500 cd/m²
		Life	50,000 hours min. ✳2		
		Brightness adjustment	200 levels ✳3		
	Touch	Technology	Projected capacitive		
		Touch resolution	Touch accuracy 1.5% (4-5 mm)		
		Multi touch	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 ignored.
✳**6.** The touchscreen can be operated when wearing gloves. Check correct usage of the gloves before using them.

Electrical Specifications

Item	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
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	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	–	–	–
Power consumption *1			–			
Maximum power consumption including drives and expansions	84 W	66 W	116 W 140 W *2	61 W 84 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	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	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		NYP27	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): • 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/s^2 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-AS07	NY000-AS08	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	1 TB	256 GB	320 GB	500 GB	1 TB	64 GB	128 GB	256 GB
Type	SSD (SLC)	SSD (SLC)	SSD (MLC)	SSD (MLC)	SSD (3DTLC)	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 550 MB/s	Up to 530 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 340 MB/s	Up to 210 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					-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	1000 TB written	416 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 106 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.
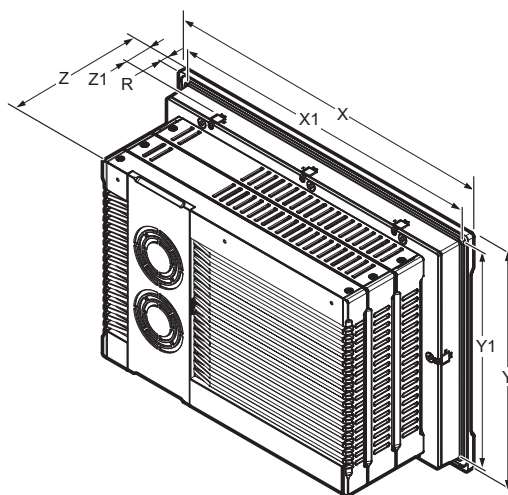✱1. For a Panel PC with an HDD: this device can only be installed in a vibration free environment only. (NYP)
✱2. Powered-ON hours include sleep and standby modes.
✱3. Operation includes seeking, writing, and reading functions.

Dimensions

Item	Panel		
	12.1 Inch		
	NYP35-□1□□□ **NYP2C-□1□□□**	**NYP27-□0□□□**	**NYP35-□0□□□** **NYP2C-□0□□□** **NYP2A-□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 = 87 mm	Width X = 332 mm Height Y = 234 mm Depth Z = 71 mm
Monitor thickness in front of panel	Rim thickness R = 8.0 mm		
Weight	5.6 kg	5.1 kg	4.7 kg

Item	Panel		
	15.4 Inch		
	NYP35-□1□□□ **NYP2C-□1□□□**	**NYP27-□0□□□**	**NYP35-□0□□□** **NYP2C-□0□□□** **NYP2A-□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	Width X = 401 mm Height Y = 277 mm Depth Z = 105 mm	Width X = 401 mm Height Y = 277 mm Depth Z = 87 mm	Width X = 401 mm Height Y = 277 mm Depth Z = 71 mm
Monitor thickness in front of panel	Rim thickness R = 8.0 mm		
Weight	6.6 kg	6.0 kg	5.6 kg

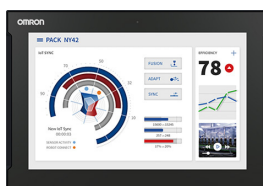| Item	Panel	
	18.5 Inch	
	NYP27-□0□□□	**NYP35-□0□□□** **NYP2C-□0□□□** **NYP2A-□0□□□**
Panel preparation dimensions	Cutout Width X1 = $463^{-0\ +1}$ mm Cutout Height Y1 = $285^{-0\ +1}$ mm	
Panel thickness range ✳	Panel thickness range Z1 = 1.6 to 6.0 mm	
Dimensions	Width X = 481 mm Height Y = 303 mm Depth Z = 87 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	
Weight	7.2 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☐☐☐ NYB27-☐☐☐☐☐ 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: • Overview • Hardware • Software • Specifications • Installation • Operating Procedures • Maintenance
NY-Series Industrial Box-PC without OS User's Manual	W586	NYB1E-☐1☐☐☐ NYB27-☐☐☐☐☐ 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: • Overview • Hardware • Software • Specifications • Installation • Operating Procedures • Maintenance
Industrial Monitor User's Manual	W554	NYM19W-C1☐☐☐ NYM15W-C10☐☐ NYM12W-C10☐☐	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-☐☐☐☐☐-19WC1☐0☐ NYP27-☐☐☐☐☐-15WC1☐0☐ NYP27-☐☐☐☐☐-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: • Overview • Hardware • Software • Specifications • Installation • Operating Procedures • Maintenance
NY-Series Industrial Panel-PC without OS User's Manual	W587	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: • 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
NY-series Operating Systems and Software Utilities Manual	W616	NYB☐☐-☐☐☐ NYP☐☐-☐☐☐	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