### **Industrial PC Platform NY-series Industrial Panel PC**

# NYP

CSM NYP DS F 3 7

### 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<sup>®</sup> Core<sup>™</sup> technology for optimum performance
- Optional NY Monitor Link interface for connectivity up to 100 m
- 12.1 and 15.4 inch industrial display
- Multi-touch projected capacitive touchscreen
- False touch detection (palm, water)
- Operator can wear gloves \*

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

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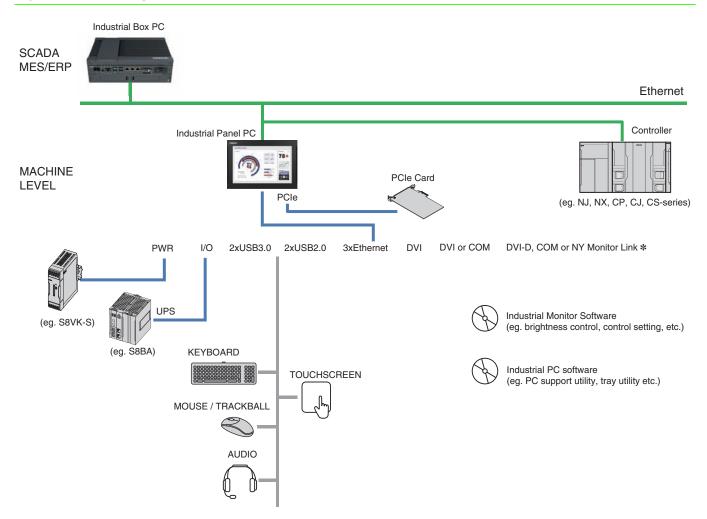
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The product photographs and figures that are used in this document may vary somewhat from the actual products.

## **System Configuration**



\*NY Monitor Link option: Connect monitor up to 100 m via 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			
3	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 PCle slot 1: 1 PCle 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 LTSB - 64 bit			
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			
9	Display ratio	W: Wide			
10	Touchscreen	C: Projected Capacitive Touch type			
11	Frame type	1: Aluminum frame, black			
12	Design	0: Standard			
13	Built-in options	0: None			
14	Logo	0: OMRON 2: Customized logo *			

<sup>\*</sup>For Europe only. Please consult your OMRON representative for details.

## **Ordering Information**

### **NY-series Industrial PC Platform**

#### **Recommended models**

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

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

Product			Spe	cifications			
name	Display size	Operating system	CPU type RAM memory (non-ECC type)		Storage size	Interface option	Model
			Intel® Core™ i7-4700EQ	8 GB	128 GB SSD type (MLC)	RS-232C	NYP17-313K1-12WC1000
		Windows 10 IoT	Intel® Core™ i5-4300U	8 GB	128 GB SSD type (MLC)	RS-232C	NYP25-313K1-12WC1000
	12.1 Inch	Enterprise LTSB - 64 bit	Intel® Core™ i5-4300U	8 GB	64 GB SSD type (SLC)	RS-232C	NYP25-31391-12WC1000
			Intel <sup>®</sup> Celeron™ 2980U	8 GB	128 GB SSD type (MLC)	RS-232C	NYP1C-313K1-12WC1000
Industrial		Windows Embedded Standard 7 - 64bit	Intel® Celeron™ 2980U	8 GB	128 GB SSD type (MLC)	RS-232C	NYP1C-312K1-12WC1000
Panel PC			Intel® Core™ i7-4700EQ	8 GB	128 GB SSD type (MLC)	RS-232C	NYP17-313K1-15WC1000
		Windows 10 IoT	Intel® Core™ i5-4300U	8 GB	128 GB SSD type (MLC)	RS-232C	NYP25-313K1-15WC1000
	15.4 inch	Enterprise LTSB - 64 bit	Intel® Core™ i5-4300U	8 GB	64 GB SSD type (SLC)	RS-232C	NYP25-31391-15WC1000
			Intel <sup>®</sup> Celeron™ 2980U	8 GB	128 GB SSD type (MLC)	RS-232C	NYP1C-313K1-15WC1000
		Windows Embedded Standard 7 - 64bit	Intel® Celeron™ 2980U	8 GB	128 GB SSD type (MLC)	RS-232C	NYP1C-312K1-15WC1000

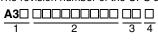
## **Accessories**

## **Optional Hardware**

Product name	Specifications	Model
OD Marrage Conda	Card type: SD Card Capacity: 2 GB Format: FAT16	HMC-SD291
SD Memory Cards	Card type: SDHC Card Capacity: 4 GB Format: FAT32	HMC-SD491
USB Flash Drives	Capacity: 2 GB	FZ-MEM2G
OSD 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	NY000-AS01
Storage Devices *1	Storage type: SSD MLC (Apacer) Capacity: 128 GB	NY000-AS02
Storage Devices &	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
USB Type-A to USB Type-B Cables	Cable length: 5 m USB 2.0 Minimum bend radius: 25 mm	FH-VUAB 5M
DW Cables	Cable length: 2 m Supports DVI-D Minimum bend radius: 36 mm	NY000-AC00 2M
DVI Cables	Cable length: 5 m Supports DVI-D Minimum bend radius: 36 mm	NY000-AC00 5M
Power Supply	Output voltage: 24 VDC     Push-In Plus terminal blocks	\$8VK-\$\ \_24
UPS <b>*2</b>	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

**<sup>\*1.</sup>** 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.



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

<sup>\*</sup> 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	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.
Utility	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.

## **General Specifications**

## **Performance Specifications**

Item			NYP17-	NYP25- □□□□□	NYP1C-	NYP35- □1□□□	NYP2C- □1□□□	NYP35- □0□□□	NYP2C- □0□□□		
		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		
		Cores / Threads	4/8	2/4	2/2	2/4	2/2	2/4	2/2		
	CPU	CPU base frequency	2.4 GHz	1.9 GHz	1.6 GHz	2.6 GHz	2.2 GHz	2.6 GHz	2.2 GHz		
	CPU	Maximum turbo frequency	3.4 GHz	2.9 GHz	-	3.5 GHz	-	3.5 GHz	-		
		Cache	6 MB	3 MB	2 MB	3 MB	2 MB	3 MB	2 MB		
Main system		Cooling details	Requires active cooling (fan)			Passive cooling (fanless)		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		
	Welliory	Memory type	DDR3L (non EC	C)		DDR4 (non E0	CC)	DDR4 (non ECC)			
	Trusted pla	tform module (TPM)	Available								
	Graphics controller		Intel® HD Graph screens.	ics. Up to two in	ndependent	Intel® HD Graphics. Up to two independent screens.		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		
	Watchdog			Yes							

	Iten	1		NYP17- □□□□□	NYP25- □□□□□		NYP35- □1□□□	NYP2C- □1□□□	NYP35- □0□□□	NYP2C- □0□□□	
Operating system	Windows O	S		Windows Embedded Standard 7 - 32 bit Windows Embedded Standard 7 - 64 bit Windows 10 IoT Enterprise LTSB - 64 bit			Windows 10 64 bit	IoT Enterprise -	Windows 10 IoT Enterprise - 64 bit		
	Hard Disk Drive		• 320 GB, 500 GB, 1 TB Serial ATA 3.0 • 320 GB Serial ATA 3.0			• 320 GB Serial ATA	• 320 GB Serial ATA 3.0		N/A		
Storage devices	Drives *3	Solid	SLC type	• 32 GB and 64 GB Serial ATA 3.1					N/A	N/A	
		State Drive	MLC type	• 128 GB Serial ATA 3.1			<u>"</u>		• 64 GB, 12 Serial ATA	8 GB, 256 GB A 3.1	
	Drive bays (	HDD/SS	D) *1	2	2	1	2	2	CFast slot	CFast slot	
	Power conn	ector	·	24 VDC			II.				
	I/O connect	or		2 inputs (Power	ON/OFF Inpu	it and UPS Mod	de Input) and 1 o	output (Power Sta	atus Output)		
		Numbe	r of ports	2							
	USB2.0		ım current	500 mA							
	Type-A	Maximu length	ım cable	5 m							
			r of ports	2							
	USB3.0	Maximu	ım current	900 mA							
Connectors	Type-A	Maximu length	ım cable	3 m							
	Ethernet	Numbe	r of ports	3							
	connectors	Physica	al layer	10BASE-T, 100BASE-TX or 1000BASE-T							
	DVI-I connector	Video ii	nterface	Digital or analog	Digital only						
		Resolution		Up to 1,920 x 1,	200 pixels at	60 Hz					
	Connector	Maximu length	ım DVI cable	Dependent upor	n connected n	nonitor type and	d resolution				
	RS-232C			Standard DSUE	9 connector (	Non-Isolated)					
		Video ii	nterface	Digital only							
	DVI-D	Resolut	tion	Up to 1,920 x 1,200 pixels at 60 Hz							
Optional	טיויט	Maximu length	ım DVI cable	Dependent upon connected monitor type and resolution							
connector (select one		Video ii	nterface	Digital only							
per system)	NIV	Resolut	tion	1,280 x 800 pixe	els at 60 Hz						
	NY Monitor	Connec	tor type	RJ45							
	Link		hielding, type x. length	S/FTP, Cat.6A,	100 m						
		USB da	ta throughput	280 Mbps max.							
PCIe Card	Configuration	on		X4 (4 lanes) up to Gen 3	X1 (1 lane) ι	up to Gen 2	X2 (2 lanes)	up to Gen 3	N/A		
Slot	Card height			Standard height	cards, 4.20 ir	nches (106.7 m	m) <b>*</b> 2		N/A		
	Card length			Half length card	s, 6.6 inches	(167.65 mm)			N/A		
D - 44	Model CJ1W-BAT01 Non replaceable battery										
Battery	Service life			5 years at 25°C 10 years at 40°C							
	Model			NY000-AF00	No fan unit						
Fan unit	nit Service life			70,000 hours of continuous operation at 40°C with 15% to 65% relative humidity							
LED				PWR, ERR, HD	D RIIN						

<sup>\*1.</sup> 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.

## **Display Specifications**

		Item	Spe	Specifications					
		item	12.1 Inch models	15.4 Inch models					
		Display device	TFT LCD						
		Screen size	12.1 inches	15.4 inches					
		Surface treatment	Anti glare treatment						
		Surface hardness	Mohs scale: 5 - 6						
	Display panel	Resolution	1,280 × 800 pixels at 60 Hz (horizontal ×	vertical)					
	*1	Colors	16,770,000 colors						
		Effective display area	261 X 163 mm (horizontal X vertical)	331 × 207 mm (horizontal × vertical)					
Diamles:		View angles	Left: 60°, Right: 60°, Top: 60°, Bottom: 60	90					
Display		Life	50,000 hours min. *2						
		Brightness adjustment	200 levels *3						
		Technology	Projected capacitive						
		Touch resolution	Touch accuracy 1.5% (4-5 mm)						
	Touch	Multitouch	Up to 5 simultaneous touches						
	Toucil	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					

<sup>\*1.</sup> 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.)

<sup>\*2.</sup> 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.

**<sup>\*5.</sup>** If a palm is detected that specific area is neglected.

<sup>\*6.</sup> The touchscreen can be operated when wearing gloves. Check correct usage of the gloves before using them.

## **Electrical Specifications**

em		NYP17- □□□□□	NYP25- □□□□□	NYP1C-	NYP35- □1□□□	NYP2C- □1□□□	NYP35- □0□□□	NYP2C- □0□□□
PU type		Intel® CoreTM i7-4700EQ CPU	Intel® CoreTM i5-4300U CPU	Intel® Celeron® 2980U CPU	Intel <sup>®</sup> Core™ i5-7300U	Intel® Celeron® Processor 3965U	Intel® Core™ i5-7300U	Intel® Celeron® Processor 3965U
ated power	supply voltage	24 VDC, non-is	olated					
llowable po	wer supply voltage range	20.4 to 28.8 VD	OC .					
rounding m	ethod	Ground to less	than 100 $\Omega$					
rush curren	t	At 24 VDC: 12	A / 6 ms max. for	r cold start at roc	om temperature			
vervoltage (	category	JIS B3502 and	IEC 61131-2: Ca	ategory II				
MC immunit	ty level	IEC 61131-2: Z	one B					
TC accurac	y	At ambient tem	perature of 55°C perature of 25°C perature of 0°C:	: -1.5 to +1.5 mir	n error per montl			
ower button	life	100,000 operat	ions					
attery life		5 years at 25°C	(for battery CJ1	W-BAT01)	10 years at 40°	C		
an life		8 years of continuous operation at 40°C	_	_	-	_	-	_
ower consu	mption *				_	•	- 11	
	um power consumption ng drives and expansions	132 W	93 W	84 W	84 W	66 W	76 W	58 W
	ım power consumption ng drives and expansions	99 W	70 W	63 W	61 W	43 W	61 W	43 W
Drives					_		-	
Н	DD 320 GB	2 W						-
Н	DD 500 GB	2 W						-
Н	DD 1 TB	2 W						_
S	SD SLC 32 GB	2 W						_
s	SD SLC 64 GB	2 W						_
s	SD MLC 128 GB	2 W						_
s	SD MLC 500 GB	3 W						_
С	Fast MLC 64 GB			_			1 W	
С	Fast MLC 128 GB			_			1 W	
С	Fast MLC 256 GB			_			1 W	
Expans	ions				_		1	
U	SB	14 W max. ((2)	x 500 mA at 5 V)	+ (2 x 900 mA a	ıt 5 V))			
Р	Cle	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.

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

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

Item	Minimum power requirements						
Power supply	240 W 120 W						
UPS	120 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/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: Conforms to JIS B3502 and IEC 61131-2.			
Applicable standards *4		EU Directives: EMC Directive 2014/30/EU (EN 61131-2) and RoHS Directive KC Registration, RCM, cULus, EAC			

<sup>\*1.</sup> The allowed ambient operating temperature and ambient humidity depend on product type, CPU type, mounting orientation, and storage device type.

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

Examples of applications subject to vibration:

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

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

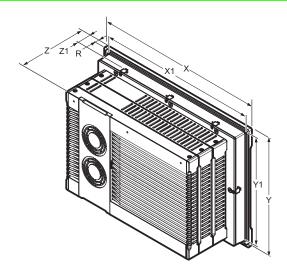
- \*3. The Panel PC may not operate properly in locations subjected to oil splashes for extended periods of time.
- \*4. Refer to the OMRON website (www.ia.omron.com) or contact your OMRON representative for the most recent applicable standards for each model.

## **Storage Device Specifications**

Item	Specifications											
Model	NY000- AS00	NY000- AS01	NY000- AS02	NY000- AS03	NY000- AS04	NY000- AS05	NY000- AH00 *1	NY000- AH01 *1	NY000- AH02 <b>*</b> 1	NY000- AT00	NY000- AT01	NY000- AT02
Capacity	32 GB	64 GB	128 GB	64 GB	128 GB	500 GB	320 GB	500 GB	1 TB	64 GB	128 GB	256 GB
Туре	SSD (SLC)	)	SSD (MLC)	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	3.0		Serial ATA 3.1		
Sustained standard read speed	Up to 160 MB/s	Up to 160 MB/s	Up to 430 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 190 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 95% (with no condensation)  10% to 95% (with no condensation)  10% to 95% (with no condensation)			10% to 95%     (with no condensation)     29°C wet-bulb temperature max.			10% to 95% (with no condensation)					
Storage temperature	-40 to 100°	C	-40 to 85°C	-40 to 90°C	-40 to 95°C	-55 to 95°C	-40 to 65°C			-55 to 95°C		
Storage humidity	10% to 959	% (with no c	ondensation	٦)				6 (with no con bulb temperat		10% to 95% (with no condensation)		
Life	1,500 TB written	3,000 TB written	114 TB written	1900 TB written	208 TB written	154 TB written	Approximate 20,000 powe hours (which first) under the conditions: • 25°C at 10 Less than powered-(month *2 Less than operation powered-( Less than seeks/more)	never comes ne following 01.3 kPa 333 ON hours/ 20% while ON \$3 1.30 x 106	Average Annualized Failure Rate (AFR): 0.50% Under the following conditions: • Case Temperat ure 40°C • Power on Hours (POH) ≤ 3120	125 TB written	208 TB written	417 TB written

<sup>\*1.</sup> 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		15.4 Inch				
Item	NYP17-□□□□□ NYP25-□□□□□ NYP1C-□□□□□	NYP35-□1□□□ NYP2C-□1□□□	NYP35-□0□□□ NYP2C-□0□□□	NYP17-□□□□□ NYP25-□□□□□ NYP1C-□□□□□	NYP35-□1□□□ NYP2C-□1□□□	NYP35-□0□□□ NYP2C-□0□□□		
Panel preparation dimensions	Cutout Width X1 = 3° Cutout Height Y1 = 2°	14 <sup>-0 +1</sup> mm 16 <sup>-0 +1</sup> mm		Cutout Width X1 = 383 <sup>-0+1</sup> mm Cutout Height Y1 = 259 <sup>-0+1</sup> 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 $X = 401 \text{ mm}$ Height $Y = 277 \text{ mm}$ Depth $Z = 105 \text{ mm}$	Width X = 401 mm Height Y = 277 mm Depth Z = 71 mm		
Monitor thickness in front of panel	Rim thickness R = 8.0 mm			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		

<sup>\*</sup> 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	NYB1E1	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	Learing 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	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:  • Overview  • Hardware  • Software  • Specifications  • Installation  • Operating Procedures  • Maintenance
Industrial Panel PC User's Manual	W555	NYP17-01-0-15WC100-0 NYP17-01-0-12WC100-0 NYP25-01-0-15WC100-0 NYP1C-01-0-15WC100-0 NYP1C-01-0-15WC100-0 NYP35-0-0-15WC100-0 NYP35-0-0-15WC100-0 NYP35-0-0-15WC100-0 NYP35-0-0-15WC100-0 NYP3C-0-0-15WC100-0 NYP2C-0-0-15WC100-0	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	NYP17-\ \_10\ \15WC100\ \ NYP17-\ \_10\ \12WC100\ \ NYP25-\ \_10\ \15WC100\ \ NYP25-\ \_10\ \12WC100\ \ NYP1C-\ \_10\ \15WC100\ \ NYP1C-\ \_10\ \15WC100\ \ NYP35-\ \_00\ \15WC100\ \ NYP35-\ \_00\ \15WC100\ \ NYP35-\ \_00\ \15WC100\ \ NYP35-\ \_00\ \15WC100\ \ NYP2C-\ \_00\ \15WC100\ \ NYP2C-\ \_00\ \12WC100\ \	Learing 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

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