Industrial PC Platform NY-series Industrial Panel PC

NYP

CSM NYP DS E 3.6

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

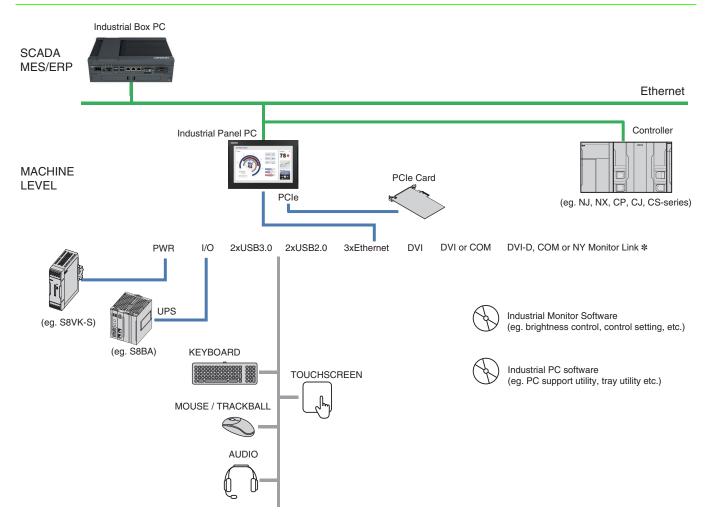
- No internal cables in the PC part eliminates faults, maximizes uptime
- Unique simplified thermal design cuts downtime
- Powerful Intel[®] Core[™] technology for optimum performance
- Optional NY Monitor Link interface for connectivity up to 100 m
- 12.1 and 15.4 inch industrial display
- Multi-touch projected capacitive touchscreen
- False touch detection (palm, water)
- Operator can wear gloves *

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

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System Configuration



*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™ i7-4700EQ • 25: Intel® Core™ i5-4300U • 1C: Intel® Coleron® 2980U • 35: Intel® Core™ i5-7300U • 2C: Intel® Celeron® 3965U • 2F: Intel® Core™ i5-7300U • 3F: Intel® Coleron® 3965U
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	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 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	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 *

^{*} 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.

Dundunt			Spe	cifications			
Product 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 Windows Embedded Standard 7 - 64bit	Intel® Core™ i5-4300U	8 GB	64 GB SSD type (SLC)	RS-232C	NYP25-31391-12WC1000
			Intel®Celeron™ 2980U	8 GB	128 GB SSD type (MLC)	RS-232C	NYP1C-313K1-12WC1000
Industrial			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 loT Enterprise LTSB - 64 bit Windows Embedded Standard 7 - 64bit	Intel® Core™ i5-4300U	8 GB	128 GB SSD type (MLC)	RS-232C	NYP25-313K1-15WC1000
	15.4 inch		Intel [®] Core™ i5-4300U	8 GB	64 GB SSD type (SLC)	RS-232C	NYP25-31391-15WC1000
			Intel® Celeron™ 2980U	8 GB	128 GB SSD type (MLC)	RS-232C	NYP1C-313K1-15WC1000
			Intel® Celeron™ 2980U	8 GB	128 GB SSD type (MLC)	RS-232C	NYP1C-312K1-15WC1000

Accessories

Optional Hardware

Product name	Specifications	Model		
	Card type: SD Card			
	Capacity: 2 GB	HMC-SD291		
D Memory Cards	Format: FAT16			
D Memory Cards	Card type: SDHC Card			
	Capacity: 4 GB	HMC-SD491		
	Format: FAT32			
SB Flash Drives	Capacity: 2 GB	FZ-MEM2G		
SB Flash Drives	Capacity: 8 GB	FZ-MEM8G		
	Storage type: HDD	NY000-AH00		
	Capacity: 320 GB	N 1000-AH00		
	Storage type: HDD	NY000-AH01		
	Capacity: 500 GB	NYUUU-AHUT		
	Storage type: HDD	ADVOCA ALICO		
	Capacity: 1 TB	NY000-AH02		
	Storage type: SSD SLC	NIVOOO ACOO		
	Capacity: 32 GB	NY000-AS00		
tauana Bardara	Storage type: SSD SLC (Apacer)	NIV000 A 004		
torage Devices	Capacity: 64 GB	NY000-AS01		
	Storage type: SSD MLC (Apacer)	NIVOOO ACOO		
	Capacity: 128 GB	NY000-AS02		
	Storage type: SSD SLC (Hagiwara)	AIV (000 A 000		
	Capacity: 64 GB	NY000-AS03		
	Storage type: SSD MLC (Innodisk)	NIV000 A 00 4		
	Capacity: 128 GB	NY000-AS04		
	Storage type: SSD MLC	111/000 1005		
	Capacity: 500 GB	NY000-AS05		
	Cable length: 2 m			
	USB 2.0	FH-VUAB 2M		
OD T A t- HOD T D O-bl	Minimum bend radius: 25 mm			
SB Type-A to USB Type-B Cables	Cable length: 5 m			
	USB 2.0	FH-VUAB 5M		
	Minimum bend radius: 25 mm			
	Cable length: 2 m			
	Supports DVI-D	NY000-AC00 2M		
VI Cables	Minimum bend radius: 36 mm			
VI Cables	Cable length: 5 m			
	Supports DVI-D	NY000-AC00 5M		
	Minimum bend radius: 36 mm			
ower Supply	Output voltage: 24 VDC	S8VK-S□□□24		
ower Suppry	Push-In Plus terminal blocks	30 11-300024		
PS *	Output voltage during backup operation: 24 VDC ± 5%	S8BA		
	Cable length: 2 m			
	Signals for			
PS Communication Cable	Signal output (BL, TR, BU, WB)	S8BW-C02		
	Remote ON/OFF input			
	UPS Stop Signal input (BS)	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.

АЗ□			
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 • PCle Card support for PCle Card installation • PCle Card clip for PCle 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	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

CPU type Cores / Thread CPU base frequ Maximum turbo Cache		Intel® Core™ i7-4700EQ 4 / 8 2.4 GHz	Intel® Core™ i5-4300U 2 / 4	Intel® Celeron® Processor 2980U 2 / 2	Intel® Core™ i5-7300U 2 / 4	Intel® Celeron® Processor 3965	
CPU base freque		4/8					
CPU base freque			2/4	2/2			
Maximum turbo	dency		1.9 GHz	1.6 GHz	2.6 GHz	2.2 GHz	
-	fraguancy	3.4 GHz	2.9 GHz	1.0 GHZ	3.5 GHz	Z.Z GI IZ	
Cacile	nequency	6 MB	3 MB	2 MB	3.5 GHZ	2 MB	
			3 IVID	2 IVID	3 IVID	2 IVID	
Cooling details		Requires active cooling (fan)	Passive cooling (1	fanless)	Passive cooling (· ·	
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	
Memory type		DDR3L (non ECC))		DDR4 (non ECC))	
latform module (Ti	PM)	Available			i		
controller		Intel® HD Graphics	s. Up to two indepe	ndent screens.	Intel® HD Graphic independent scre		
Controller		Intel® HD Graphics 4600	Intel® HD Graphics 4400	Intel® HD Graphics	Intel® HD Graphics 620	Intel® HD Graphics 610	
		Yes		•			
os		Windows Embedd	ed Standard 7 - 32 ed Standard 7 - 64 interprise LTSB - 64	bit	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 3.0		
Solid State	SLC type	• 32 GB and 64 G Serial ATA 3.1	<u></u>		• 64 GB Serial ATA 3.1		
Drive	MLC type	• 128 GB Serial ATA 3.1					
s (HDD/SSD) *1		2	2	1	2	2	
nnector		24 VDC	1	"		1	
ctor		2 inputs (Power ON/OFF Input and UPS Mode Input) and 1 output (Power Status Output)					
Number of ports		2					
Maximum current		500 mA					
	Maximum cable length						
Number of port		5 m					
Maximum curre		900 mA					
Maximum current Maximum cable length		3 m					
Number of port		3					
rs Physical layer		10BASE-T, 100BASE-TX or 1000BASE-T					
Video interface		Digital or analog Digital only					
		3 4 4 4 4 5					
Resolution		Up to 1,920 x 1,200 pixels at 60 Hz					
Maximum DVI	cable length	Dependent upon connected monitor type and resolution					
T		Standard DSUB9 connector (Non-Isolated)					
Video interface	1	Digital only					
Resolution		Up to 1,920 x 1,200 pixels at 60 Hz					
Maximum DVI		Dependent upon connected monitor type and resolution					
Video interface		Digital only					
Resolution		1,280 x 800 pixels at 60 Hz					
or Connector type)	RJ45					
Cable shielding length	g, type and max.	S/FTP, Cat.6A, 10	0 m				
USB data throu	ighput	280 Mbps max.					
ition		X4 (4 lanes) up to Gen 3 X1 (1 lane) up to Gen 2 X2 (2 lanes) up to Gen 3					
ht		Standard height ca	ards, 4.20 inches (1	06.7 mm) * 2			
th		Half length cards,	6.6 inches (167.65	mm)			
		CJ1W-BAT01			Non replaceable	battery	
fe		5 years at 25°C			10 years at 40°C		
		NY000-AF00	No fan unit				
		70,000 hours of					
		continuous					
fe					_		
Cab leng USE ation tht	ole shielding gth	ole shielding, type and max.	ble shielding, type and max. gth S/FTP, Cat.6A, 10 280 Mbps max. X4 (4 lanes) up to Gen 3 Standard height cards, CJ1W-BAT01 5 years at 25°C NY000-AF00	S/FTP, Cat.6A, 100 m S/FTP, Cat.6A, 100 m S data throughput 280 Mbps max. X4 (4 lanes) up to Gen 3 Standard height cards, 4.20 inches (167.65) CJ1W-BAT01 5 years at 25°C NY000-AF00 No fan unit	S/FTP, Cat.6A, 100 m S/FTP, Cat.6A, 100 m S/FTP, Cat.6A, 100 m Sa data throughput S/FTP, Cat.6A, 100 m X4 (4 lanes) up to Gen 2 Standard height cards, 4.20 inches (106.7 mm) *2 Half length cards, 6.6 inches (167.65 mm) CJ1W-BAT01 5 years at 25°C NY000-AF00 No fan unit	S/FTP, Cat.6A, 100 m 3 data throughput 280 Mbps max. X4 (4 lanes) up to Gen 2 Standard height cards, 4.20 inches (106.7 mm) *2 Half length cards, 6.6 inches (167.65 mm) CJ1W-BAT01 Syears at 25°C NY000-AF00 No fan unit	

^{*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.

Display Specifications

		ltom	Spe	cifications			
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 × v	vertical)			
	*1	Colors	16,770,000 colors	16,770,000 colors			
		Effective display area	261 × 163 mm (horizontal × vertical)	331 × 207 mm (horizontal × vertical)			
Nanlay		View angles	Left: 60°, Right: 60°, Top: 60°, Bottom: 60°				
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	Up to 5 simultaneous touches			
	Toucil	Features	Water detection *4, hand palm rejection :	Water detection *4, hand palm rejection *5, gloves *6			
		Life	50,000,000 operations min.	50,000,000 operations min.			
		EMC	Correct touchscreen operation is possible	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.)

The life expectancy is drastically shortened if used at high temperatures.

Electrical Specifications

Item	i	NYP17-□□□□□	NYP25-□□□□□	NYP1C-□□□□□	NYP35-□□□□□	NYP2C-□□□□□		
CPU	l type	Intel® CoreTM i7-4700EQ CPU	Intel® CoreTM i5-4300U CPU	Intel® Celeron® 2980U CPU	Intel® Core™ i5-7300U	Intel® Celeron® Processor 3965U		
Rate	ed power supply voltage	24 VDC, non-isolated						
Allo	wable power supply voltage range	20.4 to 28.8 VDC						
Grou	unding method	Ground to less than 10	00 Ω					
Inru	sh current	At 24 VDC: 12 A / 6 m	s max. for cold start at r	oom temperature				
Ove	rvoltage category	JIS B3502 and IEC 61	131-2: Category II					
EMC	immunity level	IEC 61131-2: Zone B						
RTC	accuracy	At ambient temperatur	e of 55°C: -3.5 to +0.5 r e of 25°C: -1.5 to +1.5 r e of 0°C: -3 to +1 min e	nin error per month				
Pow	ver button life	100,000 operations						
Batt	ery 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	_	-	_	_		
Pow	ver consumption *			-				
	Maximum power consumption including drives and expansions	132 W	93 W	84 W	78 W	61 W		
	Maximum power consumption excluding drives and expansions	99 W	70 W	63 W	55 W	38 W		
	Drives	- '						
	HDD 320 GB	2 W						
	HDD 500 GB	2 W 2 W						
	HDD 1 TB							
SSD SLC 32 GB		2 W						
	SSD SLC 64 GB	2 W						
	SSD MLC 128 GB	2 W						
	SSD MLC 500 GB	3 W						
	Expansions			-				
	USB	14 W max. ((2 x 500 m	nA at 5 V) + (2 x 900 mA	A at 5 V))				
	PCle	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			

^{*2.} This is the estimated time before brightness is reduced by half at room temperature and humidity.

^{*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.

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			
	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)			
Operation 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 1. 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 freenvironment. *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			

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

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.

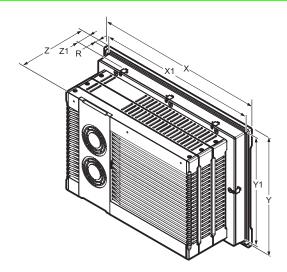
^{*2.} A Panel PC with one or more HDD storage devices should not be used in applications subject to vibration.

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 *1
Capacity	32 GB	64 GB	128 GB	64 GB	128 GB	500 GB	320 GB	500 GB	1 TB
Туре	SSD (SLC)		SSD (MLC)	SSD (SLC)	SSD (MLC)	SSD (MLC)	HDD	HDD	HDD
S.M.A.R.T. support	Yes	Yes							
Rotation speed	-	_	-	-	-	_	5,400 r/min	5,400 r/min	5,400 r/min
Interface	Serial ATA 3.1	Serial ATA 3.1				Serial ATA 3.0	Serial ATA 3.0	Serial ATA 3.0	
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	-	-	-
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	_	_	-
Operating temperature	0 to 70°C						5 to 55°C	5 to 55°C	0 to 60°C
Operating humidity	10% to 95% (with no condensation)			10% to 85% (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) 29°C wet-bulb temperature max.	10% to 95% (with no condensation) 29°C wet-bulb temperature max.
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	-40 to 65°C	-40 to 65°C
Storage humidity	10% to 95% (with no condensation)					8% to 90% (with no condensation) 40°C wet-bulb temperature max.	8% to 90% (with no condensation) 40°C wet-bulb temperature max.	8% to 90% (with no condensation) 40°C wet-bulb temperature max.	
Life	1,500 TB written	3,000 TB written	114 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 106 seeks/ month	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

^{*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	15.4 Inch			
Item	NYP17-□□□□□ NYP25-□□□□□ NYP1C-□□□□□	NYP35-□□□□□ NYP2C-□□□□□	NYP17-□□□□□ NYP25-□□□□□ NYP1C-□□□□□	NYP35-□□□□□ NYP2C-□□□□□		
Panel preparation dimensions	Cutout Width X1 = 314^{-0+1} mm Cutout Height Y1 = 216^{-0+1} mm		Cutout Width X1 = 383 ⁻⁰⁺¹ mm Cutout Height Y1 = 259 ⁻⁰⁺¹ mm			
Panel thickness range *	Panel thickness range Z1 = 1.6 to 6.0 mm		Panel thickness range Z1 = 1.6 to 6.0 mm			
Dimensions	Width X = 332 mm Height Y = 234 mm Depth Z = 121 mm	Width X = 332 mm Height Y = 234 mm Depth Z = 105 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		
Monitor thickness in front of panel	Rim thickness R = 8.0 mm		Rim thickness R = 8.0 mm			
/eight 6.1 kg 5.6 kg 7.2 kg		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	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	NYB17-□10□□ NYB25-□10□□ NYB1C-□10□□ NYB35-□10□□ NYB2C-□10□□	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-	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\ \ -15WC100\ \\ NYP25-\ \ 10\ \ -15WC100\ \\ NYP25-\ \ 10\ \ -15WC100\ \\ NYP1C-\ \ 10\ \ -15WC100\ \\ NYP1C-\ \ 10\ \ -15WC100\ \\ NYP1C-\ \ 10\ \ -15WC100\ \\ NYP35-\ \ 10\ \ -15WC100\ \\ NYP35-\ \ 10\ \ -15WC100\ \\\ NYP35-\ \ 10\ \ -15WC100\ \\\\ NYP35-\ \ 10\ \ -15WC100\ \\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	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

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