Industrial PC Platform NY-series Industrial Box PC

NYB



CSM NVB DS E 4 1

Powerful. Tough. Future-Proof.

Our NY industrial Box PC has been designed from first principles to be powerful, reliable and scalable, making it ideally suited to visualization, data handling, measuring and controlling. The latest insights in design simplification eliminates faults caused by complexity which, with other unique design features, maximizes uptime and reduces costs. The future will be IT driven: Omron's Industrial PC platform will make you part of it.







NYB1E, NYB27

NYB35, NYB2C

NYB35, NYB2C, NYB2A

Features

- No internal cables to cut faults, maximizes uptime
- Unique simplified thermal design to reduce downtime
- Powerful Intel[®] Core[™] technology for optimized performance
- Industrial CPU's with long availability
- Three Ethernet ports to increase connectivity
- USB3.0 for fast data-transmission
- Optional NY Monitor Link interface for connectivity up to 100 m

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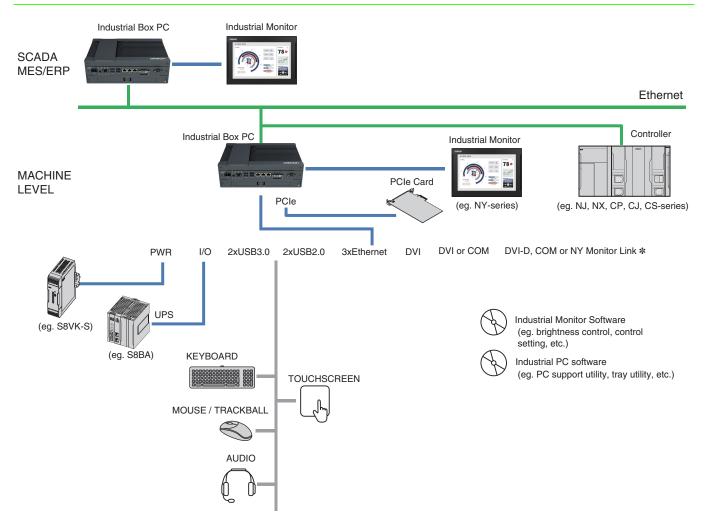
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System Configuration

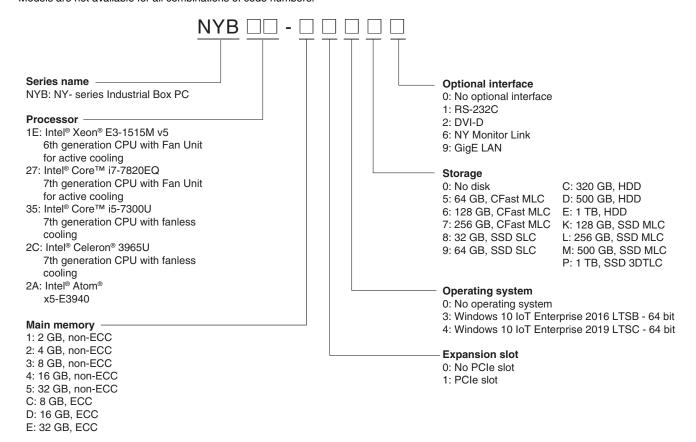


*NY Monitor Link option: Connect monitor up to 100 m via Ethernet cable.



Model Number Structure

The purpose of this model number legend is to provide understanding of the meaning of specifications from the model number. Models are not available for all combinations of code numbers.



Ordering Information

NY-series Industrial PC Platform

Recommended models

The industrial Box 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.

Dun doord warms		Model					
Product name	Operating system	CPU type	RAM memory	Storage size	Interface option	PCle-slot	Wodei
		Intel® Xeon®	8GB (non-ECC type)	128 GB SSD type	RS-232C	Yes	NYB1E-313K1
		E3-1515M v5	8GB (ECC type)	(MLC)	N3-232C	Yes	NYB1E-C13K1
	Windows 10 IoT Enterprise 2016	Intel [®] Core™	8 GB	256 GB CFast type (MLC)	No	No	NYB35-30370
	LTSB - 64 bit	i5-7300U	(non-ECC type)	128 GB SSD type (MLC)	RS-232C	Yes	NYB35-313K1
		Intel [®] Celeron™ 3965U	4 GB (non-ECC type)	256 GB CFast type (MLC)	No	No	NYB2C-20370
Industrial Box PC				128 GB SSD type (MLC)	RS-232C	Yes	NYB2C-213K1
			8 GB (non-ECC type)	128 GB SSD type (MLC)	RS-232C	Yes	NYB27-314K1
		Intel® Core™ i7-7820EQ		500 GB HDD type	RS-232C	Yes	NYB27-314D1
	Windows 10 IoT Enterprise 2019 LTSC - 64bit	17-7620EQ		64 GB SSD type (SLC)	RS-232C	Yes	NYB27-31491
		Intel® Atom®	4 GB (non-ECC type)	128 GB CFast type (MLC)	No	No	NYB2A-20460
		x5-E3940	8 GB (non-ECC type)	256 GB CFast type (MLC)	No	No	NYB2A-30470

Accessories

Optional Hardware

Product name	Specifications	Model
Mounting Brackets * 1	Book mount	NY000-AB00 NY000-AB02 NY000-AB04 NY000-AB05
	Wall mount	NY000-AB01
	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
	Card type: SDHC Card Capacity: 16 GB Format: FAT32	HMC-SD1A1
UOD Elect Delece	Capacity: 2 GB	FZ-MEM2G
JSB Flash Drives	Capacity: 8 GB	FZ-MEM8G
	Storage type: HDD, Capacity: 320 GB	NY000-AH00
	Storage type: HDD, Capacity: 500 GB	NY000-AH01
	Storage type: HDD, Capacity: 1 TB	NY000-AH02
	Storage type: SSD SLC, Capacity: 32 GB	NY000-AS00
	Storage type: SSD SLC (Apacer), Capacity: 64 GB	NY000-AS01
	Storage type: SSD SLC (Hagiwara), Capacity: 64 GB	NY000-AS03
Storage Devices	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
	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
Industrial Monitor	LCD touchscreen Multi-touch functionality Supply voltage: 24 VDC 2 USB Type-A Connectors Programmable brightness control Standard and 100 m cable models are available.	NYM1□W-C10□□
	Output voltage: 24 VDC Push-In Plus terminal blocks	S8VK-G□□□24
Power Supply	Output voltage: 24 VDC EtherNet/IP, Modbus TCP-Compatible	S8VK-X□□□24A-EIP
	Output voltage: 24 VDC Compact	\$8VK-\$\(\Box\) \(\Box\) 24
	Output voltage: 24 VDC Three-phase 200-V Power Supplies	S8VK-WA□□□24
UPS * 2	Output voltage during backup operation: 24 VDC ± 5%	S8BA
UPS Communication Cable	Cable length: 2 m Signals for • Signal output (BL, TR, BU, WB) • Remote ON/OFF input • UPS Stop Signal input (BS)	S8BW-C02

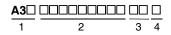
Note: Orders for NY000-AS02 are no longer accepted, as of November 30, 2018.

*1. Select the required type:
NY000-AB00: for NYB1E, NYB27-□1
NY000-AB02: for NYB35-□1, NYB2C-□1
NY000-AB04: for NYB35-□0, NYB2C-□0, NYB2A-□0

NY000-AB05: for NYB27-□0 ***2.** Revision number 04 or higher.



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 Box PC are available.

Product name	Specifications	Model
Battery	One battery is supplied with the Industrial Box PC. The battery supplies power to the real-time clock. The battery is located inside the Industrial Box PC. Service life: 5 years at 25°C	CJ1W-BAT01*
Fan Unit	The Fan Unit is available for the Industrial Box 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	Accessory Kit containing all accessories supplied with the Industrial Box 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 Box 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 Box 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	For the optional OMRON Industrial Monitor. 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	For the optional OMRON Industrial Monitor. 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	For the optional OMRON Industrial Monitor. 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,	- (Media only)	DVD	NA-RTSM
	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	1 license		NA-RTLD01
		3 licenses	USB dongle	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 dr	ive 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	1		NYB1E-	NYB27- □1□□□	NYB35- □1□□□	NYB2C-	NYB27- □0□□□	NYB35- □0□□□	NYB2C- □0□□□	NYB2A- □0□□□	
		CPU typ	e	Intel® Xeon® E3-1515M v5	Intel® Core™ i7-7820EQ	Intel® Core™ i5-7300U	Intel® Celeron® 3965U	Intel® Core™ i7-7820EQ	Intel® Core™ i5-7300U	Intel [®] Celeron [®] 3965U	Intel [®] Atom [®] x5-E3940	
		Cores /	Threads	4/8	4/8	2/4	2/2	4/8	2/4	2/2	4/4	
		CPU bas	se frequency	2.8 GHz	3.0 GHz	2.6 GHz	2.2 GHz	3.0 GHz	2.6 GHz	2.2 GHz	1.6 GHz	
	CPU	Maximu frequen	m turbo	3.7 GHz	3.7 GHz	3.5 GHz	-	3.7 GHz	3.5 GHz	-	1.8 GHz	
		Cache		8 MB	8 MB	3 MB	2 MB	8 MB	3 MB	2 MB	2 MB	
		Cooling	details	Requires act (fan)	ive cooling	Passive cod (fanless)	Passive cooling (fanless)		Passive cod	oling (fanless)	
		Intel CP	U category	Industrial (10	0% operation	minimal 10yr	.)					
lain avatam		Memory	size *1	8, 16 or 32 GB	8, 16 or 32 GB	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	
lain system	Memory	Memory	type	DDR4 (ECC is available)	DDR4 (non E	ECC)					DDR3L (non ECC)	
	Trusted pla	tform mo	dule (TPM)	Available							Ш	
	Graphics controller			Intel® Iris [™] Pro Graphics. Up to two independent screens. Intel® Iris [™]	Graphics. Up to two independent screens. Intel® HD Graphics. Up to two independent screens. screens.						Intel® HD	
				Pro Graphics P580	Intel® HD Graphics 630	Intel® HD Graphics 620	Intel® HD Graphics 610	Intel® HD Graphics 630	Intel® HD Graphics 620	Intel® HD Graphics 610	Graphics 500	
	Watchdog			Yes								
Operating system	Windows O	s 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	Windows 10 IoT IoT Enterprise Enterpri		Enterprise 2019 LTSC -	
	Hard Disk Drive		• 320 GB, 500 GB, 1 TB Serial ATA 3.0	• 500 GB, 1 TB Serial ATA 3.0	• 320 GB Serial AT	ΓA 3.0	N/A					
Storage	Drives *1	rives *1 Solid State Drive	SLC type	64 GB Serial ATA	A 3.1	• 64 GB Serial AT	4 GB erial ATA 3.1					
devices	Dives *1		MLC type	• 128 GB, 500 GB Serial ATA 3.1	• 128 GB, 256 GB, 500 GB Serial ATA 3.1	• 128 GB Serial AT	• 128 GB		1			
			3DTLC type	N/A	1 TB	N/A	N/A	N/A	N/A	N/A	N/A	
	Drive bays	(HDD/SSE	0) *2	2	2	2	2	CFast slot	CFast slot	CFast slot	CFast slot	
	Power conn	ector		24 VDC								
	I/O connect	or		2 inputs (UPS signal and power OFF control) and 1 output (Industrial Box PC power state)								
		Number	of ports	2								
	USB2.0	Maximu	m current	500 mA								
	Type-A	Maximu length	m cable	5 m								
		Number	of ports	2								
onnectors	USB3.0	Maximu	m current	900 mA								
01111001015	Type-A	Maximu length	m cable	3 m								
	Ethernet				3							
	connectors	Physica	l layer	10BASE-T, 1	00BASE-TX o	r 1000BASE	-T					
		Video in		Digital or ana		Digital only						
	DVI-I	Resolut										
	connector Maximum DVI cable length		Up to 1,920 x 1,200 pixels at 60 Hz Dependent upon connected monitor type and resolution									

			NYB1E-		10/202	NVD-6	11/202	10/202	111/200	111/201	
	Item			NYB27- □1□□□	NYB35- □1□□□	NYB2C- □1□□□	NYB27- □0□□□	NYB35- □0□□□	NYB2C- □0□□□	NYB2A- □0□□□	
	RS-232C		Standard DSUE	39 connecto	r (Non-Isolate	ed)	N/A		'		
		Video interface	Digital only				N/A				
	DVI-D	Resolution	Up to 1,920 x 1	,200 pixels	at 60 Hz		N/A				
		Maximum DVI cable length	Dependent upo resolution	n connected	d monitor type	and and	N/A				
Optional		Video interface	Digital only								
connector		Resolution	1,280 x 800 pixels at 60 Hz								
(select one per system)	NY Monitor	Connector type	RJ45								
, , ,	Link	Cable shielding, type and max. length	S/FTP, Cat.6A, 100 m								
		USB data throughput	280 Mbps max.								
	GigE LAN	Physical layer	10BASE-T, 100BASE-TX o 1000BASE-T	r			-				
PCle	Configurati	on	X4 (4 lanes) up to Gen 3		X2 (2 lanes) up to Gen 3						
Card Slot	Card height	ard height		Standard height cards, 4.20 inches (106.7 mm) *3							
	Card length		Half length cards, 6.6 inches (167.65 mm)			N/A					
	Model		CJ1W-BAT01		Non replace	able battery	CJ1W-BAT01	Non replaceable battery			
Battery	Service life	ervice life		;	10 years at	40°C *4	5 years at 25°C	10 years at 40°C *4			
	Fan unit Service life		NY000-AF00		No fan unit		NY000-AF00	No fan unit			
Fan unit			70,000 hours o' continuous ope at 40°C with 15 relative humidit	ration % to 65%	-	-	70,000 hours of continuous operation at 40°C with 15% to 65% relative humidity				
LED			PWR, ERR, HDD, RUN								

- *1. Not all combinations are possible or standard available. Please contact your Omron representative to discuss the possibilities.

- *2. Depending on the model one or two drives are supported.

 *3. Low profile cards, 2.536 inches (64.4 mm) are not supported.

 *4. Battery service life highly depend on circumtance and is in normal operation 20yr longer



Electrical Specifications

	Item	NYB1E-	NYB27- □1□□□	NYB25-	NYB1C-	NYB35- □1□□□	NYB2C- □1□□□	NYB27- □0□□□	NYB35- □0□□□	NYB2C- □0□□□	NYB2A- □0□□□
U type		Intel® Xeon® E3-1515M v5	Intel® Core TM i7-7820EQ CPU	Intel® Core TM i7-4700EQ CPU	Intel® Celeron® 2980U CPU	Intel® Core™ i5-7300U	Intel® Celeron® 3965U	Intel [®] Core [™] i7-7820EQ	Intel® Core™ i5-7300U	Intel® Celeron® 3965U	Intel® Atom® x5-E3940
ed powe	er supply voltage	24 VDC, no	n-isolated								
owable p ige	power supply voltage	20.4 to 28.8	VDC								
ounding	method	Ground to le	ess than 100	Ω							
ush curr	ent	At 24 VDC:	12 A / 6 ms r	max. for cold	start at roor	n temperatu	re				
ervoltage	e category	Meets IEC 6	61010-2-201:	Category II							
C immur	nity level	IEC 61131-	2: Zone B								
C accura	асу	At ambient	temperature :	of 55°C: -3.5 of 25°C: -1.5 of 0°C: -3 to	to +1.5 min	error per m					
wer butte	on life	100,000 ope	erations					T.			
ttery life		5 years at 25°C (for battery CJ1W-BAT01) 10 years at 40°C				t 40°C	5 years at 25°C (for battery CJ1W-BAT01)				
an life		8 years of c operation at		_	-	-	_	8 years of continuous operation at 40°C	_	_	-
ver cons	sumption *						-				
consi	mum power umption including s and expansions	121 W	121 W	75 W	66 W	69 W	50 W	101 W	61 W	42 W	41 W
consi	mum power umption excluding s and expansions	86 W	86 W	52 W	45 W	46 W	27 W	86 W	46 W	27 W	26 W
Drive	es			•			_				
	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							_		
	SSD 3DTLC 1 TB	_	3 W					_			
	CFast MLC 64 GB			-				1 W			
CFast MLC 128 GB				_				1 W			
	CFast MLC 256 GB			-				1 W			
Expansions							_	1			
Expai	nsions										
Expa	USB	14 W max.	((2 x 500 mA	at 5 V) + (2 x	k 900 mA at	5 V))					

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

Ite	em	NYB1E / NYB27	NYB35 / NYB2C / NYB27-□0 / NYB2A		
Minimum power	Power supply	240 W	120 W		
requirements	UPS	240 W	120 W		

Note: Refer to the *Industrial Box PC User's Manual* (W553) for detail.
★The total power consumption is the sum of the power consumption of all items that are installed in your Industrial Box PC.

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 Box PC is designed to meet the demands of industrial users for maximum robustness and reliability.

All maintenance sensitive products (HDD/SDD, fan, battery, and PCIe Card) can be easily reached from the outside of the system. No need to open the electronics compartment, less risk on failure.

Optional connection

RS-232C, DVI-D, NY Monitor Link or GigE LAN. NY Monitor Link allows high speed video and data communication over 100 m via Ethernet cable.

DVI-D video

Digital, up to 1,920 x 1,200 pixels at 60 Hz (Intel[®] Core[™] i7: DVI-I (Digital or analog))

3x High speed Ethernet

10BASE-T, 100BASE-TX or 1000BASE-T

2x USB2.0

500 mA maximum current Maximum cable length: 5 m

2x USB3.0

900 mA maximum current Maximum cable length: 3 m

Indication LEDs

Robust Mechanics

Full metal housing with black industrial coating

Industrial Design

Winner of the 2016 Red Dot design award* for excellent industrial design



1x PCle slot

Half Length Cards 6.6 inches Standard Height Cards 4.2 inches Easy PCIe mounting drawer

Intel® Xeon®, Intel® Core™ i7: X4 (4 lanes) Other CPUs: X1 (1 lane)

1x SD Memory Card slot

SDHC type (SD 2.0 specification) Up to 32 GB capacity

1x CFast Card slot

Storage

2.5 inch Solid State Drive (SSD) or Hard Disk Drive (HDD), 7 mm height

I/O (UPS connection)

Input:

Power sequence signal

Output:

SPST-NO contact configuration

24 VDC at 2 A switching capacity (resistive load)

Power switch

24 VDC Power

24 VDC non isolated Lockable power connector

Note: Not all combinations are possible or standard available. Please contact your Omron representative to discuss the possibilities.

* The Red Dot design award has been presented by the Design Zentrum Nordrhein Westfalen since 1955. It is one of the best-respected design competitions in the world, along with the iF award (Germany) and IDEA (the United States).



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 environment	Noise resistance (during operation)	Conforms to IEC61000-4-4, 2kV (power lines)
	Vibration resistance (during operation)	Conforms to IEC 60068-2-6. For a product with an SSD: 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. For a product with a HDD the vibration resistance depends on the mounting orientation *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	Book mount, Wall mount
	Pollution degree	2 or less: Meets IEC 61010-2-201.
Applicable sta	andards *3	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. Vibration resistance depends on the Industrial Box PC's mounting orientation and storage device type:

Mounting orientation	SSD or CFast Card	HDD
Book	9.8 m/s ²	2.5 m/s ²
Wall		4.9 m/s ²

^{*3.} 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

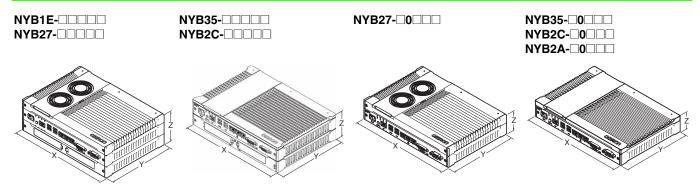
Item	Specifications												
Model	NY000- AS00	NY000- AS01	NY000- AS03	NY000- AS04	NY000- AS05	NY000- AS07	NY000- AS08	NY000- AH00	NY000- AH01	NY000- AH02	NY000- AT00	NY000- AT01	NY000- AT02
Capacity	32 GB	64 GB	64 GB	128 GB	500 GB	1 TB	256 GB	320 GB	500 GB	1 TB	64 GB	128 GB	256 GB
Туре	SSD (SLC	C)	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 AT	A 3.1				I .		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	(with no	10% to 95% 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 *1 • Less than 20% operation while powered-ON *2 • Less than 1.30 x 106 seeks/ month		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

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

^{*1.} Powered-ON hours include sleep and standby modes.

^{*2.} Operation includes seeking, writing, and reading functions.

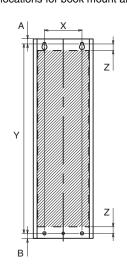
Dimensions

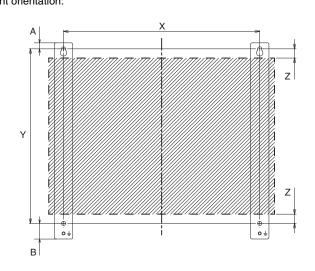


	Specifications								
Item	Вох								
	NYB1E NYB27	NYB351 NYB2C1	NYB270	NYB35-00 NYB2C00 NYB2A00					
Dimensions	Width X = 282 mm Depth Y = 195 mm. Y = 200 mm including the DVI connectors. Height Z = 88.75 mm	Width X = 282 mm Depth Y = 195 mm. Y = 200 mm including the DVI connectors. Height Z = 73 mm	Width X = 282 mm Depth Y = 195 mm. Y = 200 mm including the DVI connectors. Height Z = 56 mm	Width X = 282 mm Depth Y = 195 mm. Y = 200 mm including the DVI connectors. Height Z = 41 mm					
Weight	3.8 kg	3.0 kg	2.6 kg	2.1 kg					

Bracket Specifications

The metal mounting brackets mount your Industrial Box PC and they are the connection for the functional ground. Use metal screws with a diameter of 4 mm or 5 mm to mount the brackets. Mounting screw locations for book mount and wall mount orientation:





(Unit: mm)

	Bracket type	Bracket ID	Drill Specifications			Product Dimensions			
Model			Hole Distance X	Hole Distance Y	Distance Z	Bracket Width	Bracket Height	Top to hole A	Top to hole B
All	Wall mount	NY000-AB01	245 mm	218 mm	12 mm	23 mm	245 mm	7.5 mm	19.5 mm
NYB1E NYB27-□1□□□	Book mount	NY000-AB00	60 mm	303 mm	11 mm	96 mm	319 mm	8 mm	8 mm
NYB351	Book mount	NY000-AB02	50 mm	303 mm	11 mm	80 mm	319 mm	8 mm	8 mm
NYB35-\(0 \) \(\	Book mount	NY000-AB04	N/A	298 mm	11 mm	47 mm	339 mm	8 mm	28 mm
NYB27-\(0 \)	Book mount	NY000-AB05	25 mm	303 mm	11 mm	63 mm	339 mm	8 mm	28 mm



Recommended Related Products



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.



Industrial Panel PC NY-series

The Industrial Panel PC intelligently combines the functionality of the Industrial Box PC and Industrial Monitor. No cables are used between the two components, which ensures optimal signal distribution and reliable operation in industrial environments.



UPS S8BA-series

The OMRON S8BA UPS protects the Industrial Box 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	NYB1E1	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	NYP35	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-\(\text{\tin}\text{\texit{\text{\text{\text{\text{\text{\texi\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\tet	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