# 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, NYB17, NYB25, NYB1C

NYB35, NYB2C

NYB35, NYB2C, NYB2A

# **Features**

- No internal cables to cut faults, maximizes uptime
- Unique simplified thermal design to reduce downtime
- Powerful Intel<sup>®</sup> Core<sup>™</sup> technology for optimized performance
- Three Ethernet ports to increase connectivity
- USB3.0 for fast data-transmission
- Optional NY Monitor Link interface for connectivity up to 100 m
- Free choice of drive technology: HDD, SSD, CFast and built-in SD card slot

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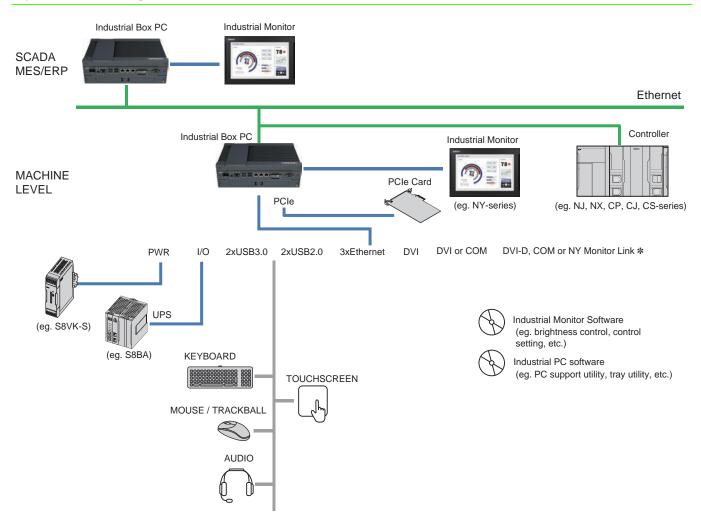
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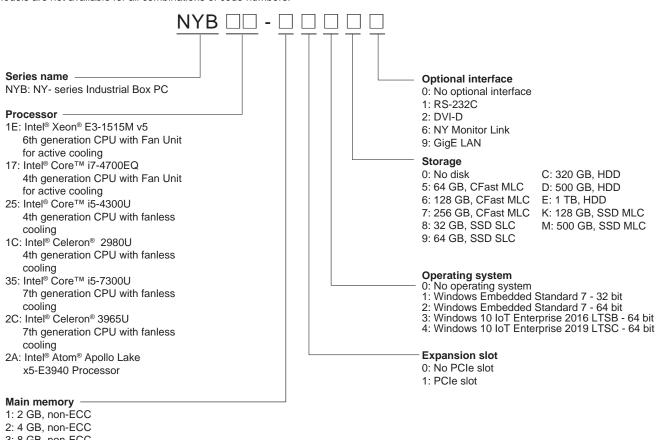
# **System Configuration**



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

# **Model Number Structure**

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



- 3: 8 GB, non-ECC
- 4: 16 GB, non-ECC
- C: 8 GB, ECC D: 16 GB, ECC

# **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.

Due due tracere		Madal					
Product name	Operating system	CPU type RAM memory		Storage size	Interface option	PCIe-slot	Model
		Intel <sup>®</sup> Xeon <sup>®</sup>	8GB (non-ECC type)	128 GB SSD type	RS-232C	Yes	NYB1E-313K1
		E3-1515M v5	8GB (ECC type)	(MLC)	R5-2320	Yes	NYB1E-C13K1
				128 GB SSD type (MLC)	RS-232C	Yes	NYB17-313K1
		Intel <sup>®</sup> Core™ i7-4700EQ	8 GB (non-ECC type)	320 GB HDD type	RS-232C	Yes	NYB17-313C1
	Windows 10 IoT Enterprise 2016 LTSB - 64 bit			64 GB SSD type (SLC)	RS-232C	Yes	NYB17-31391
Industrial Box		Intel <sup>®</sup> Core™ i5-7300U	8 GB (non-ECC type)	256 GB CFast type (MLC)	No	No	NYB35-30370
				128 GB SSD type (MLC)	RS-232C	Yes	NYB35-313K1
		Intel <sup>®</sup> Celeron™ 3965U	4 GB (non-ECC type)	256 GB CFast type (MLC)	No	No	NYB2C-20370
				128 GB SSD type (MLC)	RS-232C	Yes	NYB2C-213K1
Ť	Windows 10 IoT Enterprise 2019	Intel <sup>®</sup> Atom <sup>®</sup> x5-E3940	4 GB (non-ECC type)	128 GB CFast type (MLC)	No	No	NYB2A-20460
	LTSC - 64bit	Processor	8 GB (non-ECC type)	256 GB CFast type (MLC)	No	No	NYB2A-30470

# **Accessories**

### **Optional Hardware**

Product name	Specifications	Model
Mounting Brackets <b>*</b> 1	Book mount	NY000-AB00 NY000-AB02 NY000-AB04
	Wall mount	NY000-AB01
SD Memory Cards	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
ICD Fleek Drives	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 Devices *2	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	Cable length: 2 m USB 2.0 Minimum bend radius: 25 mm	FH-VUAB 2M
Cables	Cable length: 5 m USB 2.0 Minimum bend radius: 25 mm	FH-VUAB 5M
	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	<ul> <li>LCD touchscreen</li> <li>Multi-touch functionality</li> <li>Supply voltage: 24 VDC</li> <li>Up to 1,280 x 800 pixels at 60 Hz</li> <li>2 USB Type-A Connectors</li> <li>Programmable brightness control</li> <li>Standard and 100 m cable models are available.</li> </ul>	NYM1□W-C10□□
Power Supply	Output voltage: 24 VDC     Push-In Plus terminal blocks	S8VK-S024
JPS <b>*</b> 3	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, NYB17, NYB25, NYB1C, NY51

NY000-AB02: for NYB35-□1, NYB2C-□1 NY000-AB04: for NYB35-□0, NYB2C-□0

**\*2.** CFast Storage can be used only with the NYB35- $\Box$ 0, NYB2C- $\Box$ 0. Please contact your Omron representative to discuss the possibilities. **\*3.** 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	2	3	4	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. <ul> <li>Power connector</li> <li>I/O connector</li> <li>Drive bracket for drive installation</li> <li>4 mounting screws for drive installation</li> <li>PCIe Card support for PCIe Card installation</li> <li>PCIe Card clip for PCIe Card installation</li> </ul>	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 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
	The Soft-NA is software that displays information on FA manufacturing sites while providing safety, reliability,	_ (Media only)	DVD	NA-RTSM
Soft-NA	and maintainability as an industrial display on which operations can be performed as necessary. The Soft-NA runs on the following OS:	1 license		NA-RTLD01
		3 licenses	USB dongle	NA-RTLD03
	Windows 10 Pro Version 1903 or later 64 bit	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 of	trive necessary for installation	1 GB or more
Optical disk drive		DVD-ROM drive
Communication next	USB	USB2.0 Type-A x 2 *1
Communication port	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			NYB1E-	NYB17-	NYB25-	NYB1C-	NYB35-	NYB2C-	NYB35-	NYB2C-	NYB2A-	
		CPU type		Intel <sup>®</sup> Xeon <sup>®</sup> E3-1515M v5	Intel <sup>®</sup> Core™ i7-4700EQ	Intel <sup>®</sup> Core™ i5-4300U	Intel <sup>®</sup> Celeron <sup>®</sup> Processor 2980U	Intel <sup>®</sup> Core™ i5-7300U	Intel <sup>®</sup> Celeron <sup>®</sup> Processo r 3965U	Intel <sup>®</sup> Core™ i5-7300U	Intel <sup>®</sup> Celeron <sup>®</sup> Processo r 3965U	Intel <sup>®</sup> Atom <sup>®</sup> Processor x5-E3940	
		Cores / Thre	eads	4/8	4/8	2/4	2/2	2/4	2/2	2/4	2/2	4/4	
	CPU	CPU base frequency		2.8 GHz	2.4 GHz	1.9 GHz	1.6 GHz	2.6 GHz	2.2 GHz	2.6 GHz	2.2 GHz	1.6 GHz	
		Maximum tu	urbo	3.7 GHz	3.4 GHz	2.9 GHz	_	3.5 GHz	_	3.5 GHz	_	1.8 GHz	
		frequency Cache		8 MB	6 MB	3 MB	2 MB	3 MB	2 MB	3 MB	2 MB	2 MB	
		Cooling det	ails	Requires active (fan)	cooling	Passive coo	ling (fanless)						
Main		Memory siz	e *1	8, 16 or 32 GB	4, 8 or 16	2, 4 or 8 GB	2, 4 or 8 GB	4 or 8 GB	4 or 8 GB	8 or 16	4 or 8 GB	2, 4 or 8 GE	
system	Memory	Memory typ		DDR4 (ECC is	GB DDR3L (nor		,	DDR4 (no	n ECC)	GB DDR4 (no		DDR3L (non ECC)	
	Trusted plat		(TPM)	Available) Available Intel® Iris <sup>TM</sup> Pro Graphics. Up to two independent Intel® HD Graphics. Up to two independent screens.									
	Graphics controller			screens. Intel <sup>®</sup> Iris <sup>™</sup> Pro Graphics P580	Intel <sup>®</sup> HD Graphics 4600	Intel <sup>®</sup> HD Graphics 4400	Intel <sup>®</sup> HD Graphics	Intel <sup>®</sup> HD Graphics 620	Intel <sup>®</sup> HD Graphics 610	Intel <sup>®</sup> HD Graphics 620	Intel <sup>®</sup> HD Graphics 610	Intel <sup>®</sup> HD Graphics 500	
	Watchdog			Yes		•		1	•	·		1	
Operating system	Windows OS	5		Windows 10 IoT Enterprise 2016 LTSB - 64 bit	bit Windows Er bit	nbedded Stan nbedded Stan IoT Enterprise	dard 7 - 64	Windows 10 IoT Enterprise 2016 LTSB - 64 bit		Windows 10 I oT Enterprise 2016 LTSB - 64 bit		Windows 10 IoT Enterprise 2019 LTSC 64 bit	
	Drives *1	Hard Disk D	k Drive • 320 GB, 50 Serial ATA			320 GB     Serial AT	A 3 0	320 GB     Serial A		N/A		I	
		Solid State Drive MLC type		64 GB Serial ATA 3.1	• 32 GB an Serial AT	d 64 GB		• 64 GB Serial A		N/A			
Storage devices				<ul> <li>128 GB, 500 GB</li> <li>Serial</li> <li>ATA 3.1</li> </ul>	• 128 GB Serial AT	• 128 GB Serial ATA 3.1					• 64 GB, 128 GB, 256 GB Serial ATA 3.1		
	Drive bays (HDD/SSD) *2		2	2	2	2	1	2	2	CFast slot	CFast slot	CFast slot	
	Power connector		24 VDC										
	I/O connecto	1		2 inputs (UPS signal and power OFF control) and 1 output (Industrial Box PC power state)									
	USB2.0 Number of ports		2 500 mA										
	Туре-А	Maximum cable		500 mA 5 m									
		length Number of p	oorts	2									
Connecto	USB3.0	Maximum c		2 000 mA									
rs	Туре-А	Maximum c length	able	3 m	3 m								
	Ethernet	Number of p		3									
	connectors	Physical lay Video interf		10BASE-T, 100BASE-TX or 1000BASE-T       Digital or analog       Digital only									
	DVI-I	Resolution	ace	Up to 1,920 x 1	0								
	connector	Maximum D		Dependent upo	•		and resolution						
	RS-232C	cable length		Standard DSU						N/A			
		Video interf	ace	Digital only		Υ.				N/A			
	DVI-D	Resolution		Up to 1,920 x 1	,200 pixels at 60 Hz					N/A			
		Maximum D cable lengt		Dependent upo	on connected	monitor type a	and resolution			N/A			
Optional		Video interf	ace	Digital only			-			-	-		
connector (select		Resolution Connector t	vne	1,280 x 800 pix RJ45	els at 60 Hz								
one per system)	NY Monitor Link	Cable shield type and ma length	ding,	S/FTP, Cat.6A,	100 m								
		USB data throughput		280 Mbps max									

	Item	NYB1E-	NYB17-	NYB25-	NYB1C-	NYB35-	NYB2C-	NYB35-	NYB2C-	NYB2A-	
PCle Card	Configuration	X4 (4 lanes) up	to Gen 3	X1 (1 lane) u	p to Gen 2	X2 (2 lanes) up to Gen 3 N/A					
Slot	Card height	Standard heigh	t cards, 4.20	inches (106.7	mm) <b>*3</b>	N/A					
	Card length	Half length card	ls, 6.6 inches	(167.65 mm)		N/A					
Battery	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	Service life	70,000 hours of operation at 40 to 65% relative			-						
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.** Not recommended for new projects.

### **Electrical Specifications**

	ltem	NYB1E-	NYB17-	NYB25-		NYB35-	NYB2C-	NYB35-	NYB2C-			
U tyj	pe	Intel <sup>®</sup> Xeon <sup>®</sup> E3-1515M v5	Intel <sup>®</sup> Core™ i7-4700EQ CPU	Intel <sup>®</sup> Core™ i7-4700EQ CPU	Intel <sup>®</sup> Celeron <sup>®</sup> 2980U CPU	Intel <sup>®</sup> Core™ i5-7300U	Intel <sup>®</sup> Celeron <sup>®</sup> Processor 3965U	Intel <sup>®</sup> Core™ i5-7300U	Intel <sup>®</sup> Celeron <sup>®</sup> Processor 3965U	Intel <sup>®</sup> Atom <sup>®</sup> Processo x5-E3940		
ted p	oower supply voltage	24 VDC, no	n-isolated									
owal	ble power supply voltage range	20.4 to 28.8	3 VDC									
ound	ling method	Ground to le	ess than 100	Ω								
ush	current	At 24 VDC:	12 A / 6 ms r	nax. for cold	start at room	temperature						
ervo	Itage category	Meets IEC	61010-2-201:	Category II								
C im	nmunity level	IEC 61131-	2: Zone B									
C ac	curacy	At ambient	temperature o temperature o temperature o	of 25°C: -1.5	to +1.5 min e	rror per mont						
wer I	button life	100,000 op	erations									
tery	life	5 years at 2	25°C (for batte	ery CJ1W-BA	T01)	10 years at	40°C					
n life		8 years of c operation a		-	-	_	-	-	-	-		
wer	consumption *					-						
	laximum power consumption ncluding drives and expansions	121 W	114 W	75 W	66 W	69 W	50 W	61 W	42 W	41 W		
	laximum power consumption xcluding drives and expansions	86 W	81 W	52 W	45 W	46 W	27 W	46 W	27 W	26 W		
D	Prives		-									
	HDD 320 GB	2 W						-				
	HDD 500 GB	2 W	2 W							-		
	HDD 1 TB	2 W							-			
	SSD SLC 32 GB	2 W						_				
	SSD SLC 64 GB	2 W	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				
E	xpansions					_		1				
	USB	14 W max.	((2 x 500 mA	at 5 V) + (2 x	900 mA at 5	V))						
	PCIe	15 W max.	15 W max.	5 W max.	5 W max.	5 W max.	5 W max.		-			

\* 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.

ite	em	NYB1E / NYB17	NYB25 / NYB1C / NYB35 / NYB2C / NYB2A		
Minimum power	Power supply	240 W	120 W		
requirements	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 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 standard Ethernet cable.

DVI-D video Digital, up to 1,920 x 1,200 pixels at 60 Hz (Intel<sup>®</sup> Core<sup>™</sup> 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 PCIe slot

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

Intel<sup>®</sup> Xeon<sup>®</sup>, Intel<sup>®</sup> Core<sup>™</sup> 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/s <sup>2</sup> for 10 times each in X, Y and Z directions. For a product with a HDD the vibration resistance depends on the mounting orientation <b>*</b> 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

 Applicable standards \*3
 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 <sup>2</sup>	2.5 m/s <sup>2</sup>
Wall		4.9 m/s <sup>2</sup>

\*3. Refer to the OMRON website (www.ia.omron.com) or contact your OMRON representative for the most recent applicable standards for each model.

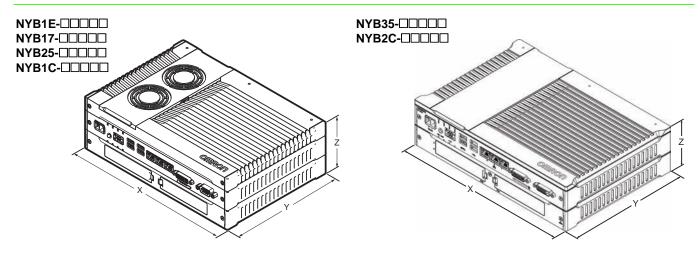
### **Storage Device Specifications**

Item	Specifications										
Model	NY000- AS00	NY000- AS01	NY000- AS03	NY000- AS04	NY000- AS05	NY000- AH00	NY000- AH01	NY000- AH02	NY000- AT00	NY000- AT01	NY000- AT02
Capacity	32 GB	64 GB	64 GB	128 GB	500 GB	320 GB	500 GB	1 TB	64 GB	128 GB	256 GB
Туре	SSD (SLC)		SSD (SLC)	SSD (MLC)	SSD (MLC)	HDD	HDD	HDD	CFast (MLC)	CFast (MLC)	CFast (MLC)
S.M.A.R.T. support	Yes					1	1		1	1	
Rotation speed	-	-	-	-	-	5,400 r/min			-	-	-
Interface	Serial ATA	3.1				Serial ATA 3.	0		Serial ATA 3.1		
Sustained standard read speed	Up to 160 MB/s	Up to 160 MB/s	Up to 500 MB/s	Up to 530 MB/s	Up to 415 MB/s	-	-	-	Up to 530 MB/s	Up to 530 MB/s	Up to 530 MB/s
Sustained standard write speed	Up to 145 MB/s	Up to 150 MB/s	Up to 370 MB/s	Up to 190 MB/s	Up to 200 MB/s	-	_	-	Up to 100 MB/s	Up to 190 MB/s	Up to 210 MB/s
Operating temperature	0 to 70°C					5 to 55°C	5 to 55°C	0 to 60°C	-40 to 85°C		
Operating humidity	10% to 95% (with no condensation)10% to 85% (with no condensati ion)10% to 95% (with no condensation)			8% to 90% (with no condensation)			10% to 95% (with no condensation)				
Storage temperature	-40 to 100°	C	-45 to 90°C	-55 to 95°C	-55 to 95°C	-40 to 65°C			-55 to 95°C		
Storage humidity	10% to 95% (with no condensation)				8% to 90% (with no condensation) 5% to 95% (with no condensation)			10% to 95% (with no condensation)			
Life	1,500 TB written	3,000 TB written	1900 TB written	208 TB written	154 TB written	Approximately 5 years or 20,000 powered-ON hours (whichever comes first) under the following conditions: • 25°C at 101.3 kPa • Less than 333 powered- ON hours/month *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) $\leq$ 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.

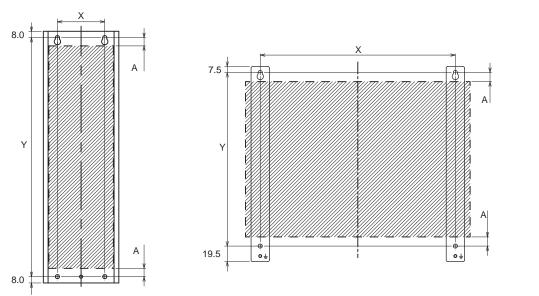
# Dimensions



	Specifications						
	Box						
Item	XYB1E-00000 NYB17-00000 NYB25-00000 NYB1C-00000	NYB35-□1□□□ NYB2C-□1□□□	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 = 41 mm				
Weight	3.8 kg	3.0 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:



Model	Bracket type		Drill Specifications	Product Dimensions		
Model		Hole Distance X	Hole Distance Y	Hole Distance A	Bracket Width	Bracket Height
NYB1E NYB25	Book mount	60 mm	303 mm	11 mm	96 mm	319 mm
NYB17 NYB1C	Wall mount	245 mm	218 mm	12 mm	23 mm	245 mm
NYB35-01000	Book mount	50 mm	303 mm	11 mm	80 mm	319 mm
NYB2C-0100	Wall mount	245 mm	218 mm	12 mm	23 mm	245 mm
NYB35-0000	Book mount	n.a.	298 mm	11 mm	47 mm	319 mm
NYB2C-00000 NYB2A-00000	Wall mount	245 mm	218 mm	12 mm	23 mm	245 mm

(Unit: 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 NYB171 NYB251 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	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	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	NYP17-11       -15WC100         NYP17-11       -12WC100         NYP25-11       -15WC100         NYP25-11       -12WC100         NYP1C-11       -12WC100         NYP1C-11       -15WC100         NYP1C-11       -15WC100         NYP35-       -15WC100         NYP35-       -15WC100         NYP2C-       -15WC100         NYP2C-       -15WC100         NYP2C-       -12WC100         NYP35-00       -19WC100         NYP2C-       -19WC100	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 • Soptware • Specifications • Installation • Operating Procedures • Maintenance
NY-Series Industrial Panel-PC without OS User's Manual	W587	NYP1710       -15WC100         NYP1710       -12WC100         NYP2510       -15WC100         NYP2510       -12WC100         NYP1C10       -12WC100         NYP1C10       -12WC100         NYP3500       -15WC100         NYP3500       -12WC100         NYP3500       -12WC100         NYP2C00       -15WC100         NYP2500       -12WC100         NYP3500       -12WC100         NYP3500       -12WC100         NYP3500       -12WC100         NYP2C00       -19WC1	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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