

Transitioning to the sophisticated appearance of NA5 series while preserving the software assets of NS series

By running NS software on NS-Runtime along with sophisticated appearance of NA5 series,
The software assets of NS are inherited, and migration to NA5 can be performed smoothly

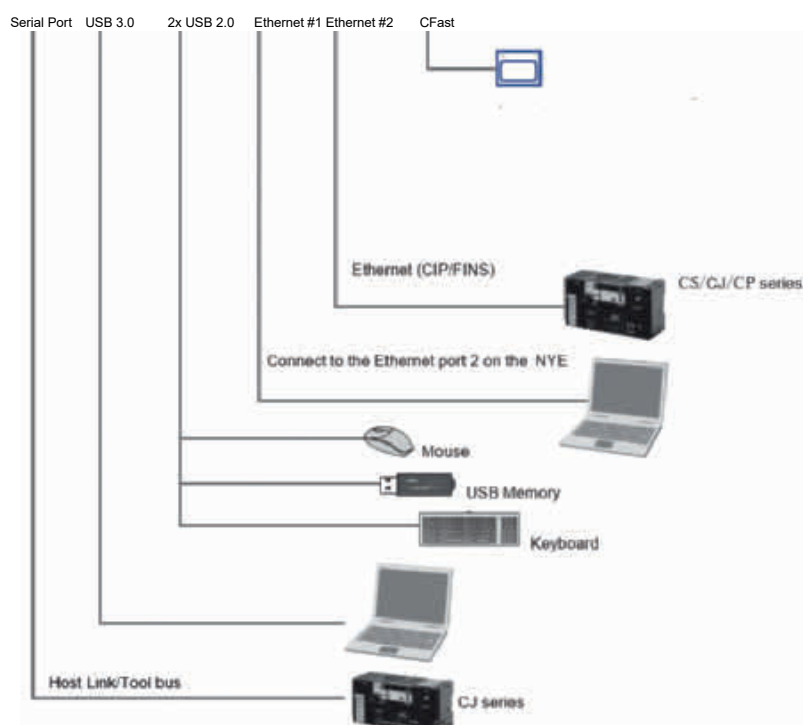


Features

- Widescreen in all models: 7, 9, 12, and 15 inches
- More than 16 million color display for all models and 1280 x 800 high resolution display for the 12 and 15-inch mod

System Configuration

NYE with NS-Runtime



Ordering Information

NYE

Model-ID	Specifications	Model ¹
NYE□□-□□□□□-15□□	15.4 inch wide screen, TFT LCD, 16,770,000 colors, 1280 × 800 dots, Frame color: Silver	NYE2A-20S11-15WR1300
	15.4 inch wide screen, TFT LCD, 16,770,000 colors, 1280 × 800 dots, Frame color: Black	NYE2A-20S11-15WR1200
NYE□□-□□□□-12□□	12.1 inch wide screen, TFT LCD, 16,770,000 colors, 1280 × 800 dots, Frame color: Silver	NYE2A-20S11-12WR1300
	12.1 inch wide screen, TFT LCD, 16,770,000 colors, 1280 × 800 dots, Frame color: Black	NYE2A-20S11-12WR1200
NYE□□-□□□□□-09□□	9 inch wide screen, TFT LCD, 16,770,000 colors, 800 × 480 dots, Frame color: Silver	NYE2A-20S11-09WR1300
	9 inch wide screen, TFT LCD, 16,770,000 colors, 800 × 480 dots, Frame color: Black	NYE2A-20S11-09WR1200
NYE□□-□□□□-07□□	7 inch wide screen, TFT LCD, 16,770,000 colors, 800 × 480 dots, Frame color: Silver	NYE2A-20S11-07WR1300
	7 inch wide screen, TFT LCD, 16,770,000 colors, 800 × 480 dots, Frame color: Black	NYE2A-20S11-07WR1200
High-pressure Waterproof Attachment	This metal frame is for high-pressure waterproofing. Install it to conform to UL Type 4X standards. UL Type 4X is the rating for high-pressure wash-down applications with a flow rate of 246 liter/min.	NA-15WATW01
		NA-12WATW01
		NA-9WATW01
		NA-7WATW01

Options

Product name	Specifications	Model
CFast card	128GB, Innodisk DECFA-A28DK1GWADL with NS-Runtime	NY000-AT04-NS
USB Memory	2 GB	FZ-MEM2G
	8 GB	FZ-MEM8G
Replacement Battery	Battery life: 5 years (at 25°C). This Battery is provided as an accessory.	CJ1W-BAT01
USB Type-A to USB Type-B Cables	2m, USB2.0, Minimum bend radius: 25mm	FH-VUAB 2M
	5m, USB2.0, Minimum bend radius: 25mm	FH-VUAB 5M
Power Supply	Output voltage: 24 VDC	S8VK-G□□□24
		S8VK-X□□□24A-EIP
		S8VK-S□□□24
		S8VK-WA□□□24
UPS	Output voltage during backup operation: 24 VDC±5%	S8BA with revision number 04 or higher ^{*1}
UPS Communication Cable	Signals for • Signal output (BL, TR, BU, WB) • Remote ON/OFF input • UPS Stop Signal input (BS) Cable length 2m	S8BW-C02
Anti-reflection Sheets	For 15" LCD models. Attach a Sheet to the screen to protect against diffused reflections and dirt. The entire Sheet is colorless and transparent. Five Sheets are provided in one set.	NA-15WKBA04
	For 12" LCD models. Attach a Sheet to the screen to protect against diffused reflections and dirt. The entire Sheet is colorless and transparent. Five Sheets are provided in one set.	NA-12WKBA04
	For 9" LCD models. Attach a Sheet to the screen to protect against diffused reflections and dirt. The entire Sheet is colorless and transparent. Five Sheets are provided in one set.	NA-9WKBA04
	For 7" LCD models. Attach a Sheet to the screen to protect against diffused reflections and dirt. The entire Sheet is colorless and transparent. Five Sheets are provided in one set.	NA-7WKBA04

*1. The revision number of the UPS can be retrieved from the serial number label on the product and the product packaging.

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System Requirements

Item	Requirement	
OS	Windows 10	
Processor	Intel Atom Quadcore E3940	
RAM	4 GB DDR3L	
Fast storage	1 slot	
Communication port	USB	USB2.0 Type-A x 2, USB3.0 Type-A x 1
	LAN	Ethernet x 2

USB Cable

Product name	Specifications
USB Cable	Use commercially available USB cable. Specifications: USB 2.0 cable (A connector - B connector), 5.0 m max.

Recommended Network Devices

Industrial Switching Hubs

Product name	Functions	No. of ports	Accessories	Current consumption (A)	Model
Industrial Switching Hubs	Quality of Service (QoS): EtherNet/IP control data priority 10/100BASE-TX, Auto-Negotiation	5	Power supply connector	0.07	W4S1-05D

Recommended Ethernet Communications Cables

Use STP (shielded twisted-pair) cable of category 5 or higher

Product name		Recommended manufacturer	Model
Wire Gauge and Number of Pairs: AWG24, 4-pair Cable	Cables	Hitachi Metals, Ltd	NETSTAR-C5E SAB 0.5 × 4P CP
		Kuramo Electric Co.	KETH-SB
	RJ45 Connectors	Panduit Corporation	MPS588

Note: We recommend you to use above cable and RJ45 Connectors together.

Performance Specifications

Display

Item		Specification			
		NYE□-□-15WR□	NYE□-□-12WR□	NYE□-□-09WR□	NYE□-□-07WR□
Display panel ^{*1}	Display device	TFT LCD			
	Screen size	15.4 inches	12.1 inches	9.0 inches	7.0 inches
	Resolution	1,280 × 800 dots (horizontal × vertical)		800 × 480 dots (horizontal × vertical)	
	Colors	16,770,000 colors (24 bit full colors)			
	Effective display area	331 × 207 mm (horizontal × vertical)	261 × 163 mm (horizontal × vertical)	197 × 118 mm (horizontal × vertical)	152 × 91 mm (horizontal × vertical)
	View angles	Left: 60°, Right: 60°, Top: 60°, Bottom: 60°			
Backlight ^{*2}	Life	50,000 hours min. ^{*3}			
	Brightness adjustment	200 levels			
	Type	LED			
Front panel indicators ^{*4}	RUN	Lit green: Normal operation Lit red: Error			

^{*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 ranges.

Model	Standard range
NYE□-□-15W□	Number of light and dark pixels: 10 or less. (There must not be 3 consecutive light/dark pixels.)
NYE□-□-12W□	
NYE□-□-09W□	
NYE□-□-07W□	

^{*2}. The backlight can be replaced at an OMRON maintenance base.

^{*3}. This is the estimated time before brightness is reduced by half at room temperature and humidity. The life expectancy is drastically shortened if Programmable Terminal is used at high temperatures.

^{*4}. The brightness of the front panel indicators is also adjustable when you adjust the brightness of the backlight.

Operation

Item	Specification			
	NYE□-□-15WR□	NYE□-□-12WR□	NYE□-□-09WR□	NYE□-□-07WR□
Touch panel	Method: Analog resistive membrane type			
	Resolution: 16,384 × 16,384			
	Life: 1,000,000 operations			

External Interfaces

Item		Specifications (Same for all models.)
Ethernet ports	Applications	Port 1: Device connection to PC or PLC Port 2: Device connection to PC or PLC
	Number of ports	2 ports
	Compliant standards	IEEE 802.3i (10BASE-T), IEEE 802.3u (100BASE-TX), and IEEE 802.3ab (1000Base-T)
	Transmission media	Shielded twisted-pair (STP) cable: Category 5, 5e, or higher
	Transmission distance	100 m
	Connector	RJ-45 8P8C modular connector
USB host ports ^{*1} ^{*2}	Applications	USB Memory Device, keyboard, or mouse
	Number of ports	2 ports
	Compliant standards	USB 2.0
	Transmission distance	5 m max.
	Connector	Type-A connector
USB host port ^{*1} ^{*2}	Applications	USB Memory Device, keyboard, or mouse
	Number of ports	1 port
	Compliant standards	USB 3.0
	Transmission distance	5 m max.
	Connector	Type-A connector
Serial port ^{*3}	Applications	Device Connection
	Number of ports	1 port
	Compliant standards	RS-232C
	Transmission distance	15 m max.
	Connector	D-DUB 9-pin female connector
CFast Card slot	Applications	To storage data and install software products
	Number of slots	1 slot
	Compliant standards	CFast

^{*1}. Connection to all USB 2.0 or 3.0-compliant devices is not guaranteed.

^{*2}. Use a USB memory for temporary applications such as transferring data.

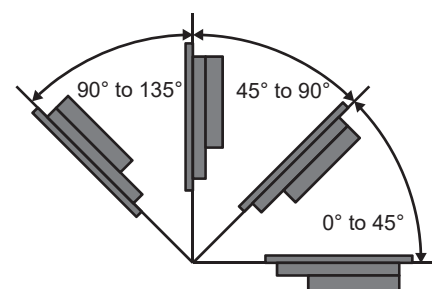
^{*3}. The serial port is for future expansion.

General Specifications

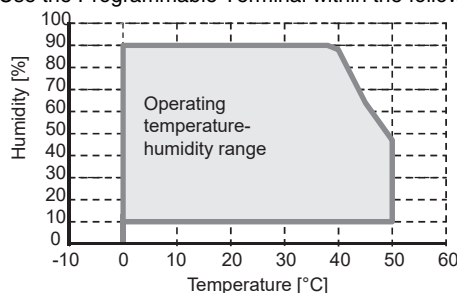
Item	Specification			
	NYE□-□-15WR□	NYE□-□-12WR□	NYE□-□-09WR□	NYE□-□-07WR□
Rated supply voltage	24 VDC			
Allowable power supply voltage range	19.2 to 28.8 VDC (24 VDC ±20%)			
Allowable momentary power interruption time	Operation for momentary power interruption is not specified.			
Power consumption	60 W max.	60 W max.	30 W max.	30 W max.
Ambient operating temperature	0 to 50°C ^{*1} ^{*2}			
Ambient storage temperature	• 20 to +60°C ^{*3}			
Ambient operating humidity	10 to 90% ^{*2} Must be no condensation.			
Atmosphere	Must be free from corrosive gases.			
Pollution degree	2 or less: Meets IEC 61010-2-201.			
Noise immunity	2 kV on power supply line (Conforms to IEC 61000-4-4.)			
Vibration resistance (during operation)	Conforms to IEC 60068-2-6. 5 to 8.4 Hz with 3.5 mm half amplitude and 8.4 to 150 Hz with 9.8 m/s ² for 100 minutes each in X, Y, and Z directions (Time coefficient of 10 minutes × coefficient factor of 10 = total time of 100 min.)			
Shock resistance (during operation)	Conforms to IEC 60028-2-27. 147 m/s ² 3 times each in X, Y, and Z directions			
Dimensions	420 × 291 × 69 mm (W × H × D)	340 × 244 × 69 mm (W × H × D)	290 × 190 × 69 mm (W × H × D)	236 × 165 × 69 mm (W × H × D)
Panel cutout dimensions	392 ⁰⁺¹ × 268 ⁰⁺¹ mm (horizontal × vertical) Panel thickness: 1.6 to 6.0 mm ^{*4}	310 ⁰⁺¹ × 221 ⁰⁺¹ mm (horizontal × vertical) Panel thickness: 1.6 to 6.0 mm ^{*4}	261 ⁰⁺¹ × 166 ⁰⁺¹ mm (horizontal × vertical) Panel thickness: 1.6 to 6.0 mm ^{*4}	197 ^{0+0.5} × 141 ^{0+0.5} mm (horizontal × vertical) Panel thickness: 1.6 to 6.0 mm ^{*4}
Weight	3.2 kg max.	2.4 kg max.	1.8 kg max.	1.4 kg max.
Degree of protection	Front-panel controls: IP65 oil-proof type, UL Type 4X (at initial state) To reinstall the NA Unit in a panel, contact your OMRON representative for replacement of the rubber packing.			
Battery life	Battery life: 5 years at 25°C The RTC will be backed up for 5 days after the battery runs low. The RTC will be backed up by a super capacitor for 5 minutes after removing the old battery. (This assumes that the power is first turned ON for at least 5 minutes and then turned OFF.)			
International standards ^{*5}	UL61010-2-201/CSA C22.2 NO.61010-2-201:14 ^{*6} EMC Directive (2004/108/EC) EN 61131-2:2007 IP65 oil-proof, UL Type 4X ^{*7} (front panel only)			

*1.

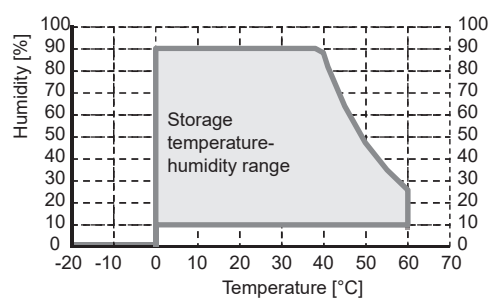
Product Orientation	Mounting Angle	Storage device type
		C Fast Card
Landscape	0° to 45°	0 to 40°C
	45° to 90°	0 to 45°C
	90°	50°C
	90° to 135°	0 to 45°C



*2 Use the Programmable Terminal within the following temperature and humidity ranges.



*3. Store the Programmable Terminal within the following temperature and humidity ranges.



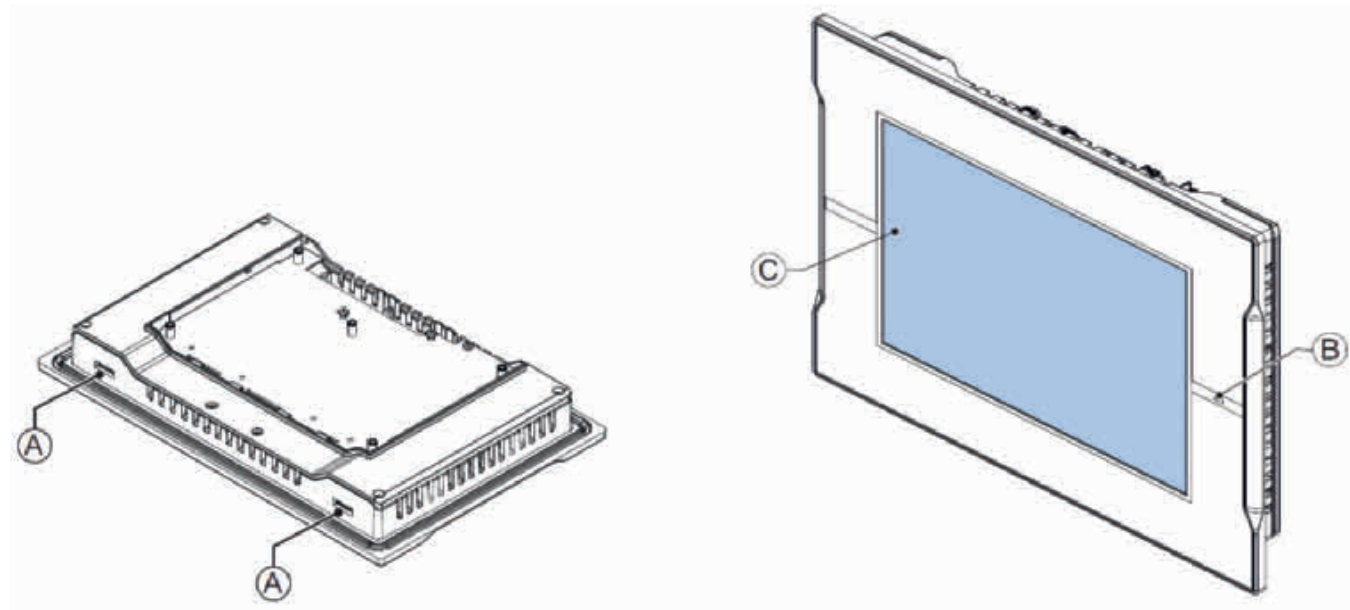
*4. When the NA-□WATW01 High-pressure Waterproof Attachment is used, the panel thickness is between 1.6 to 4.5 mm.

*6. Use power supply Class 2 to conform to UL Standards.

*7. Use the NA-□WATW01 High-pressure Waterproof Attachment (sold separately) to conform to UL Type 4X.

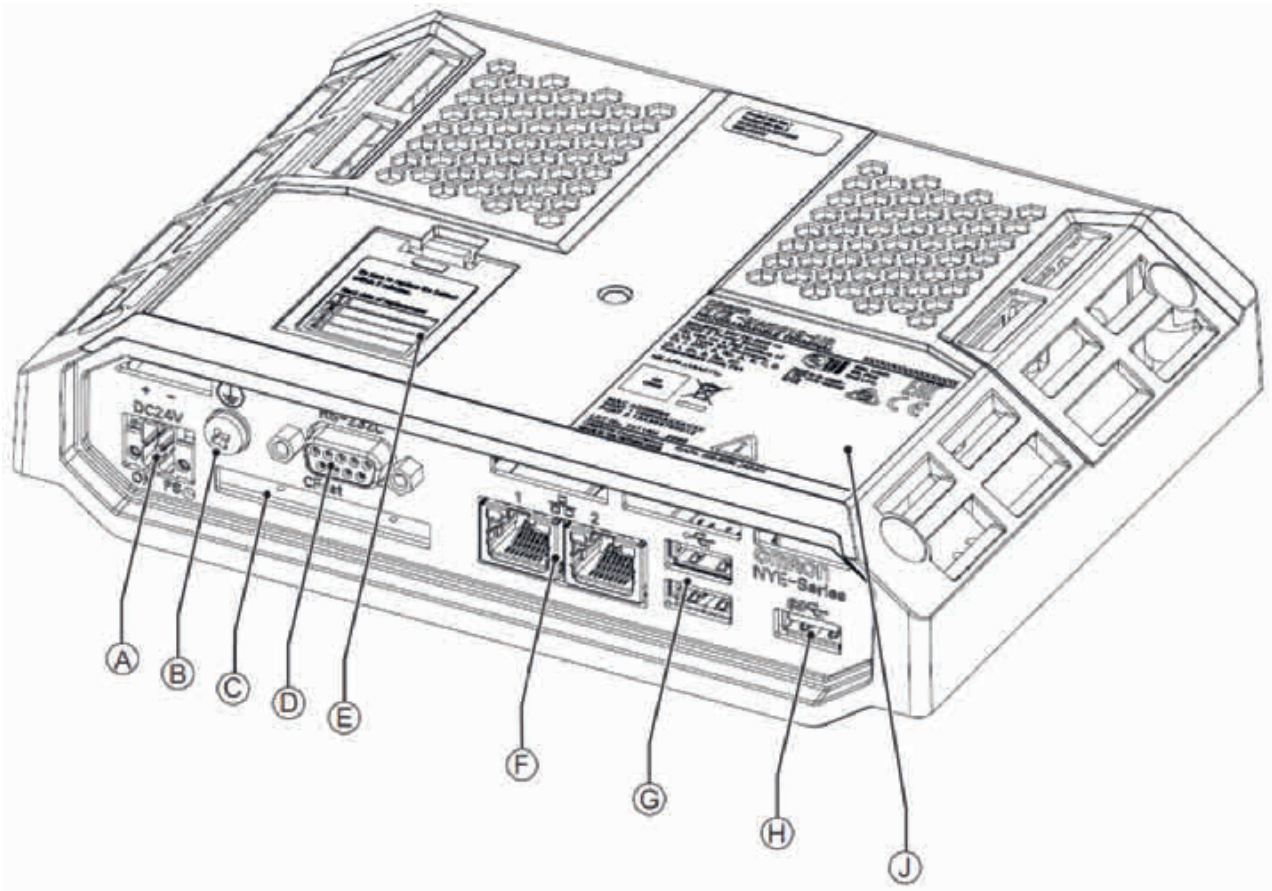
Components and Functions

Display Layer NYE



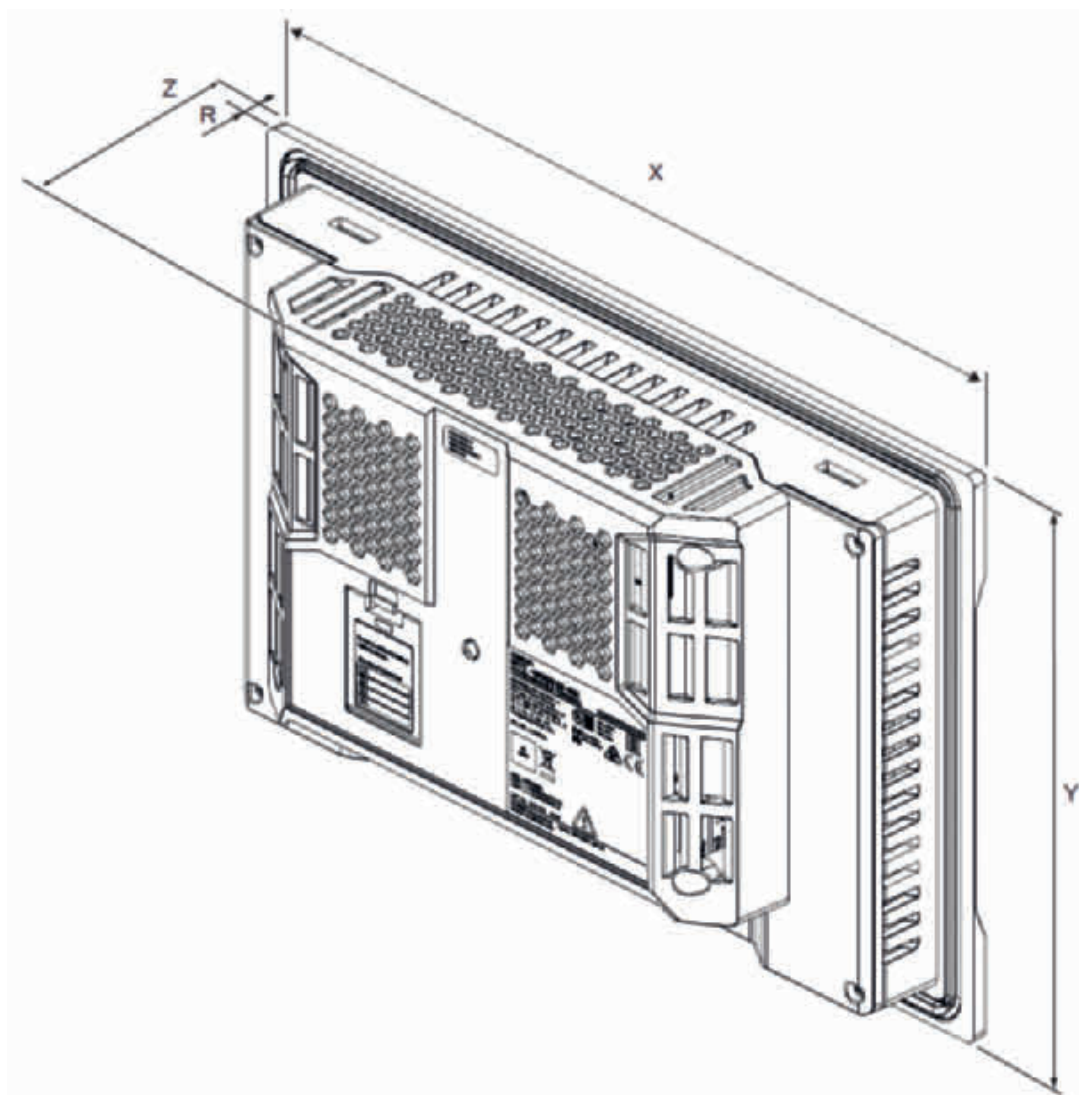
Item	Name	Description
A	Mounting brackets	Opening for mounting clamps to secure the Panel PC on a mounting surface
B	Status LED indicator	LED to indicate power and status
C	Touchscreen LCD	LCD display

Base Layer NYE



Item	Name	Description
A	Power and I/O connector	Lockable power and I/O connector
B	Ground terminal	Provides a ground terminal for the Panel PC
C	CFast Card Slot	CFast Card Slot
D	RS232C connector	RS232 connector
E	Battery cover	Cover for replaceable battery
F	10BASE-T/100BASE-TX/ 1000BASE-T Ethernet connectors.	2 x RJ45 Gb Ethernet interface connectors
G	USB 2.0 connectors	2 x USB 2.0 interface connectors
H	USB 3.0 connector	USB 3.0 interface connector
J	Id information label	Label containing model-ID, Lot No. and other product specific information

Dimensions and Weight



15" Display NYE-Series

The following table provides specification details on dimensions and weights for the Panel PC with 15" display.

Model	Specifications					
Model-ID	Model Details	Width X	Height Y	Depth Z	Weight	Rim thickness R
NYE□□-□□□□□-15□□	15" display	420 mm	291 mm	69 mm	3.2 kg	6.0 mm

12" Display NYE-Series

The following table provides specification details on dimensions and weights for the Panel PC with 12" display.

Model	Specifications					
Model-ID	Model Details	Width X	Height Y	Depth Z	Weight	Rim thickness R
NYE□□-□□□□□-12□□	12" display	340 mm	244 mm	69 mm	2.4 kg	6.0 mm

9" Display NYE-Series

The following table provides specification details on dimensions and weights for the Panel PC with 9" display.

Model	Specifications					
Model-ID	Model Details	Width X	Height Y	Depth Z	Weight	Rim thickness R
NYE□□-□□□□□-09□□	9" display	290 mm	190 mm	69 mm	1.8 kg	6.0 mm

7" Display NYE-Series

The following table provides specification details on dimensions and weights for the Panel PC with 7" display.

Model	Specifications					
Model-ID	Model Details	Width X	Height Y	Depth Z	Weight	Rim thickness R
NYE□□-□□□□□-07□□	7" display	236 mm	165 mm	69 mm	1.4 kg	6.0 mm

