

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

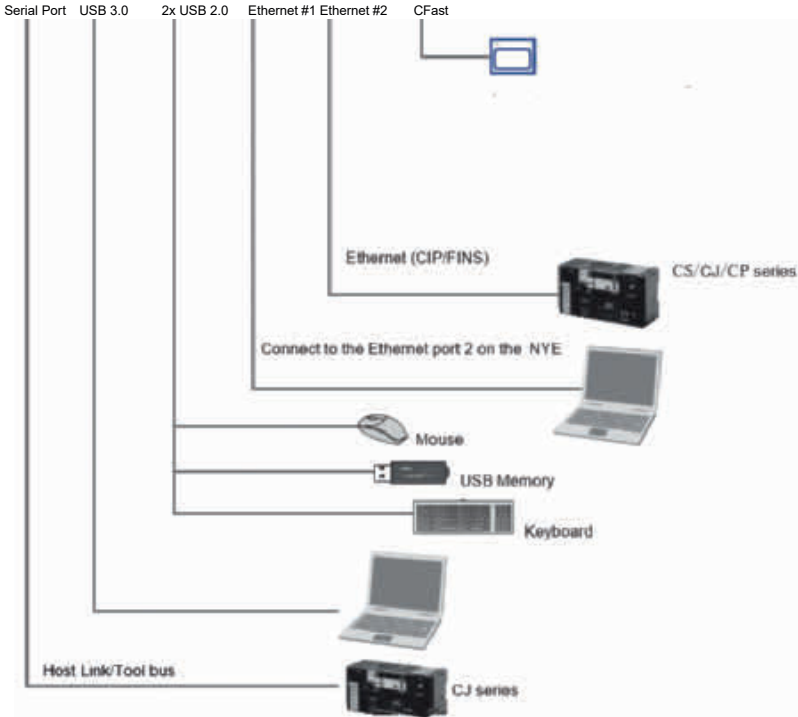


Features

- 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

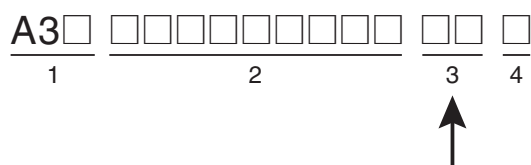
NYE

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 <ul style="list-style-type: none"> • 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.



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 x 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
USB host ports ^{*1 *2}	Connector	RJ-45 8P8C modular connector
	Applications	USB Memory Device, keyboard, or mouse
	Number of ports	2 ports
	Compliant standards	USB 2.0
	Transmission distance	5 m max.
USB host port ^{*1 *2}	Connector	Type-A connector
	Applications	USB Memory Device, keyboard, or mouse
	Number of ports	1 port
	Compliant standards	USB 3.0
	Transmission distance	5 m max.
Serial port ^{*3}	Connector	Type-A connector
	Applications	Device Connection
	Number of ports	1 port
	Compliant standards	RS-232C
	Transmission distance	15 m max.
CFast Card slot	Connector	D-DUB 9-pin female connector
	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.

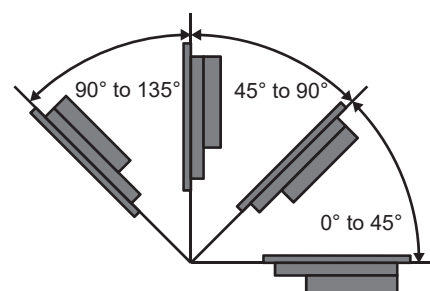
*3. The serial port is for future expansion.

General Specifications

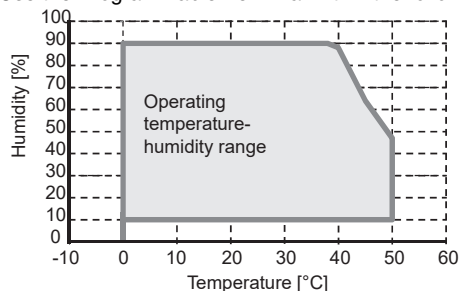
Item	Specification			
	NYE□-□-15WR□	NYE□-□-12WR□	NYE□-□-09WR□	NYE□-□-07WR□
Rated supply voltage	24 VDC			
Allowable power supply voltage range	19.2 to 28.8 VDC (24 VDC ±20%)			
Allowable momentary power interruption time	Operation for momentary power interruption is not specified.			
Power consumption	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.

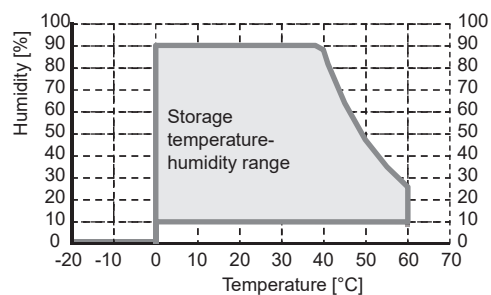
Product Orientation	Mounting Angle	Storage device type
		C Fast Card
Landscape	0° to 45°	0 to 40°C
	45° to 90°	0 to 45°C
	90°	50°C
	90° to 135°	0 to 45°C



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



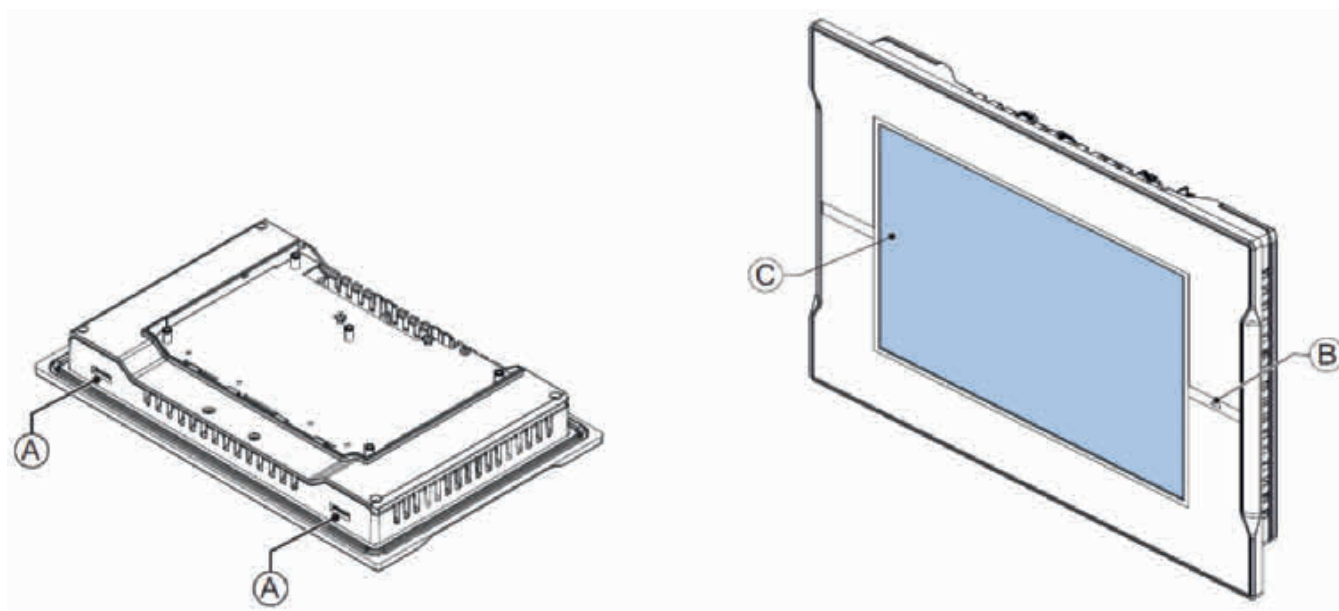
*3 Store the Programmable Terminal within the following temperature and humidity ranges.



- *4. When the NA-□WATW01 High-pressure Waterproof Attachment is used, the panel thickness is between 1.6 to 4.5 mm.
- *5. Check with your OMRON representative or refer to the following OMRON website for the latest information on the applicable standards for each model: www.ia.omron.com.
- *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.

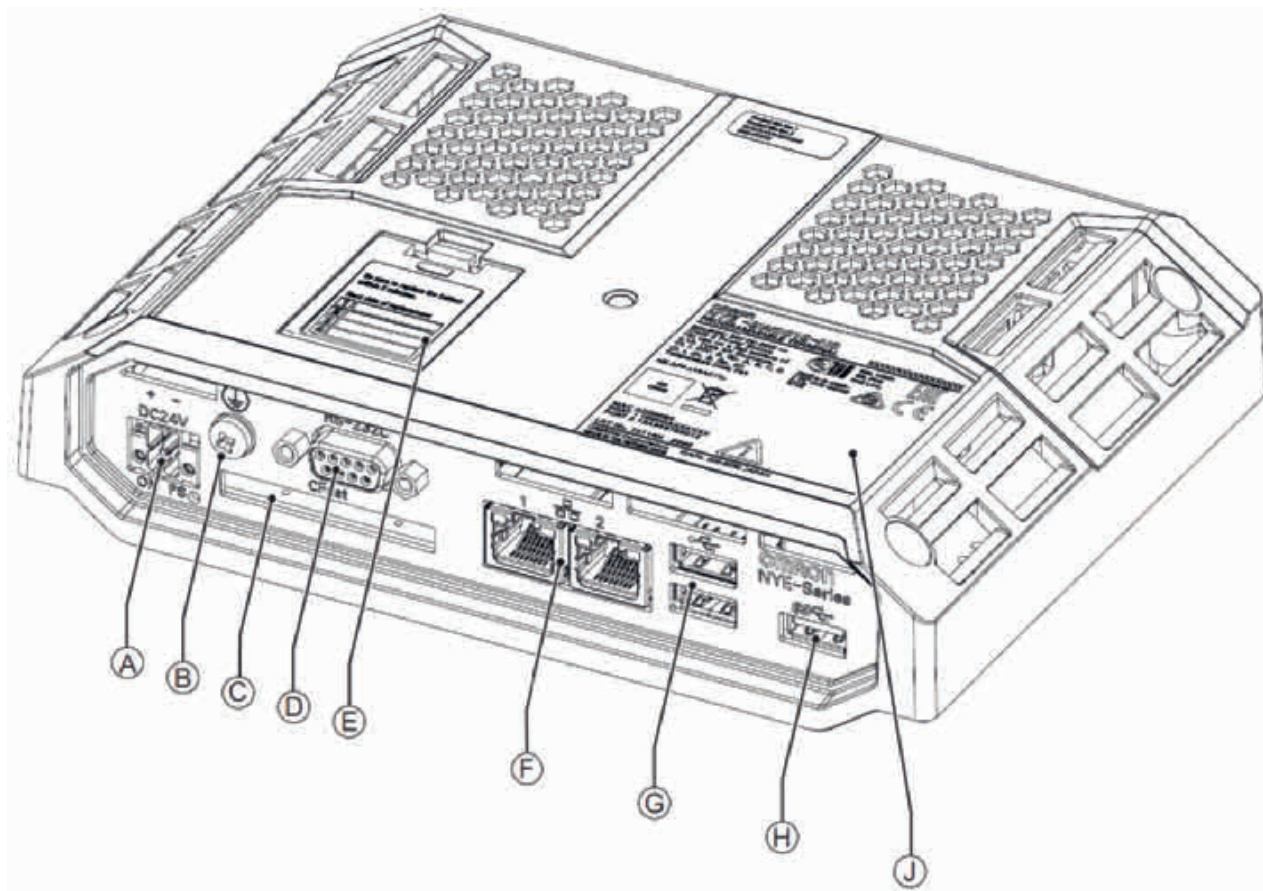
Components and Functions

Display Layer NYE



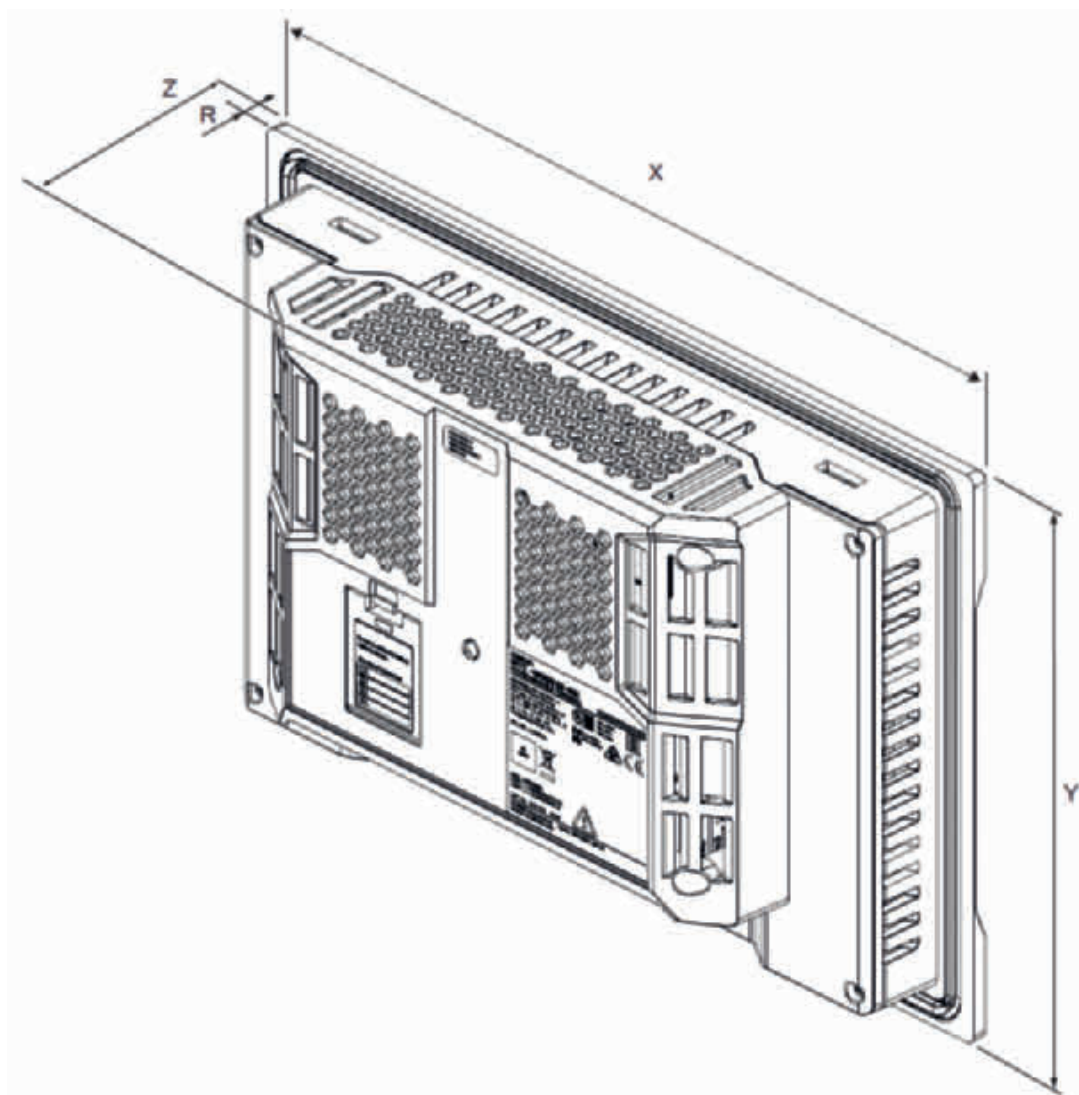
Item	Name	Description
A	Mounting brackets	Opening for mounting clamps to secure the Panel PC on a mounting surface
B	Status LED indicator	LED to indicate power and status
C	Touchscreen LCD	LCD display

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

ALL DIMENSIONS SHOWN ARE IN MILLIMETERS.

To convert millimeters into inches, multiply by 0.03937. To convert grams into ounces, multiply by 0.03527.