

# eXT2 SERIES



## 12-Inch eXT2 HMI

The 12" eXT2 Series Xpanel HMI combines a high-resolution display, faster processing power, and a slim, durable design tailored for industrial applications. Built for demanding environments, it offers robust performance and reliability. The Advanced (DF) model adds extra connectivity and rugged protection, ideal for versatile, high-demand use.

**Base:** eXT2-12W-R-DE

**Advanced:** eXT2-12W-R-DF

**High Brightness:** eXT2-12W-RH-DF

### Product Highlights

- Wide operating temperature (-20 - +70 °C)
- High resolution, wide-screen display
- Quad-core high-speed processor
- 2GB of RAM; 8GB of Storage
- Slim profile & light weight
- Resistive touch screen
- 1 USB-C port, 2 serial ports, dual Ethernet ports, 1 line-out audio port, and 1 microSD card slot
- High brightness with UV coating
- Canvas software
- VNC Compatibility
- FDA 21 CFR Part 11 Compliance
- Embedded SQLite Database
- Email and text notifications

### Supported Protocols

- **Client Device (Ethernet):** Allen Bradley EtherNet/IP, ODVA EtherNet/IP, Siemens S7, Mitsubishi MELSEC, Modbus TCP, OPC UA, Omron FINS, Proface GPEthernet, Fatek FBs, LSIS FEnet, CIMON PLC
- **Client Device (Serial):** Allen Bradley DF-1, Mitsubishi MELSEC, Modbus RTU, LSIS Cnet, Omron HostLink, Panasonic FP7, Yokogawa FA M3, CIMON PLC
- **Server Device (Ethernet):** EtherNet/IP, Modbus TCP, MQTT JSON Publisher, OPC UA
- **Server Device (Serial):** Modbus RTU



Functional

Model		Base	Advanced	High Brightness
Part Number		eXT2-12W-R-DE	eXT2-12W-R-DF	eXT2-12W-RH-DF
Enclosure	Front	Aluminum		
	Rear	Plastic	Aluminum	
LCD Size		12.1 inch Wide TFT Color		
Colors		16.7M		
Resolution		1280 x 800 WXGA (16:10)		
Effective Display Area (W xH)		261.12 x 163.2 mm		
PPI		125		
Backlight		LED		
Luminance		600 cd/m <sup>2</sup>	1,000 cd/m <sup>2</sup>	
Contrast Ratio		1000:1		
Backlight Life		50,000 Hours		
Touch Panel		5 wire resistive		
Touch Panel Accuracy		Active Area Width (X) ±2%, Height (Y) ±2%		
Display Orientation		Landscape (Standard, 180°), Portrait (90°, 270°)		
Memory		2 GB LPDDR4		
Storage		8 GB eMMC		
SD Card		-	1 x MicroSD card slot	
COM 1		RS-422/485		
COM 2		RS-232C		
Ethernet		1 x 10/100/1000 port	2 x 10/100/1000 ports	
USB Host		1 x Type A		
Tool Port		1 x USB-C		
Audio		-	1 x Line-out port	
Rated Voltage		24 VDC, Class 2		
Inrush Current		30 A maximum		
Power Consumption		21.2 W (Max: 22.7 W)	21.6 W (Max: 23W)	
Operating System		Embedded Linux		
Project Memory		250 MB		
User Memory		4 GB		
Realtime Clock		Realtime clock built into panel, backed up for 10 years at 25°C		
Acknowledgment Sound		Electronic buzzer		
Agency Approvals	UL	UL61010-1 / UL61010-2-201 (E231117)		
	CE	Electromagnetic Compatibility Directive 2014/30/EU (EMC)		
	FCC	The 47 CFR, Part2, Part15 and Part 18 Of FCC Requirement		
	KC	Registration of Broadcasting and Communication Equipments		
	Protection Class (Front)	IP66, NEMA Type 4X, 12	IP68, NEMA Type 4X, 12	

Environmental

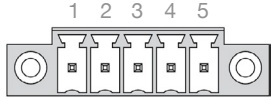
Model	Base	Advanced	High-Brightness
Operating Temperature	0 – 65°C (32 –149°F)	-20 – +70°C (-4 – +158°F)	
Storage Temperature	-25 – +75°C (-13 – +167°F)		
Operating Humidity	10–90% RH (below 29°C, not condensed)		
Storage Humidity	10–90% RH (below 39°C, not condensed)		

Pin Assignments

**COM1: RS-422/485**

PIN	Name	Description
1	RDB	Receive Data B
2	RDA	Receive Data A
3	GND	Ground
4	SDB	Send Data B
5	SDA	Send Data A

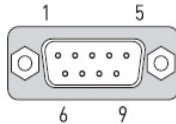
**Connector**



**COM2: RS-232C**

PIN	Name	Description
1	-	-
2	RD	Receive Data
3	TD	Transmit Data
4	-	-
5	SG	Signal Ground
6	-	-
7	RTS	Request to Send
8	CTS	Clear to Send
9	-	-

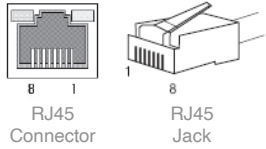
**Connector**



**Ethernet**

PIN	Description
1	TP0+
2	TP0-
3	TP1+
4	TP2+
5	TP2-
6	TP1-
7	TP3+
8	TP3-

**Connector**



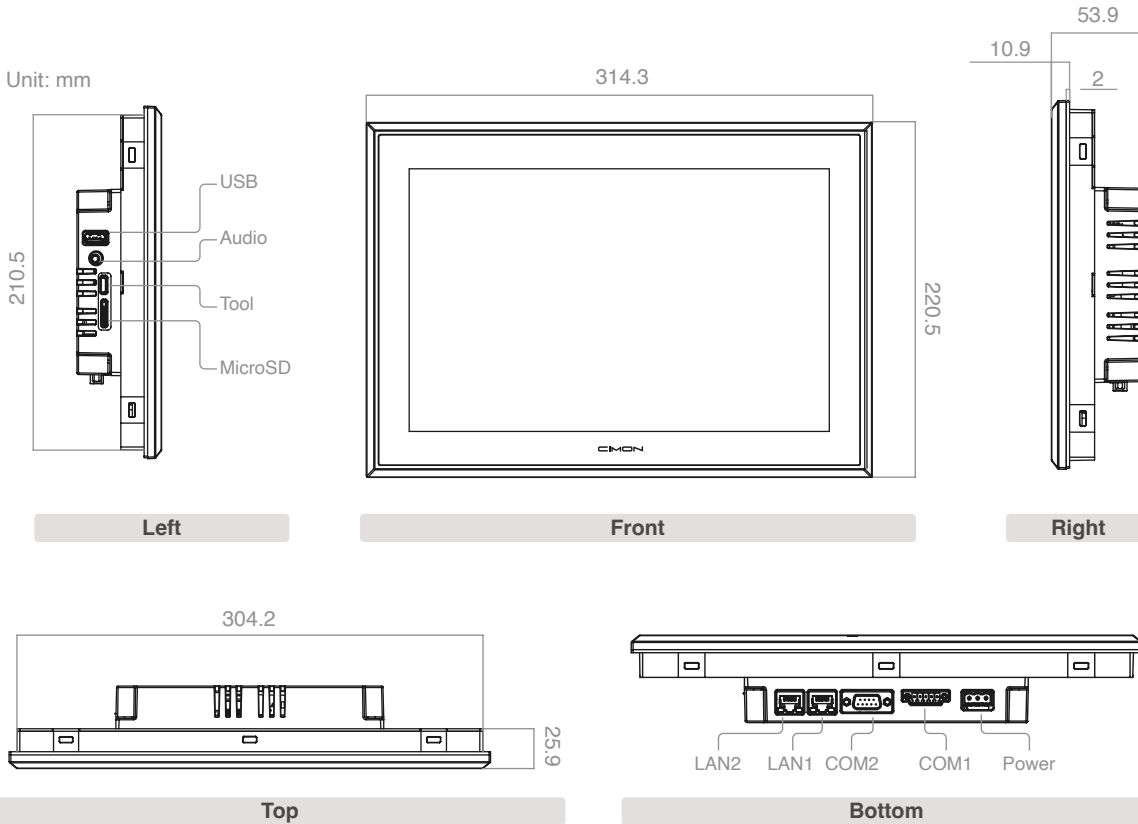
Physical

Model	Base	Advanced	High-Brightness
Dimensions	314.3 x 220.5 x 53.9 mm (12.37 x 8.68 x 2.12 in)		
Panel Cut	305 x 212 mm (12 x 8.35 in)		
Weight	2.2 kg (4.85 lbs)	2.4 kg (5.29 lbs)	
VESA (W x H)	N/A	75 mm x 75 mm	

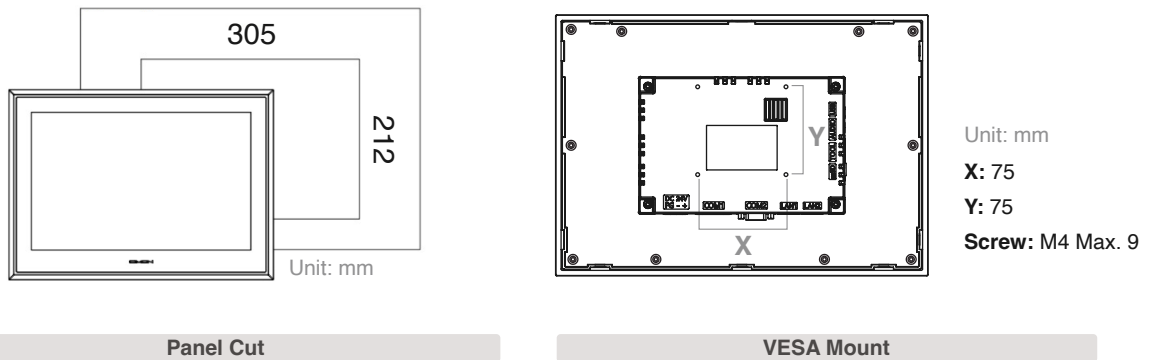
Accessories

Quantity	Description
10	Fastener
1	5-Pin Connector (RS-422/485)
1	Power Terminal Block
1	User Manual

Spec Drawings



Installation



Version: 03  
Updated: 03.13.2025