eXT2 SERIES



12-Inch eXT2 HMI

The 12” eXT2 Series Xpanel HMI delivers robust performance in a compact design, certified for demanding industrial environments and available with Class I Division 2 Hazardous rating (Extreme models). With enhanced processing power, high-resolution visuals, and a sleek, lightweight profile, it’s built to meet rigorous standards for both functionality and durability.

Resistive	Capacitive
Advanced: CM-eXT2-12W-R-DF	**Advanced:** CM-eXT2-12W-C-DF
Extreme: CM-eXT2-12W-RH-DF	**Extreme:** CM-eXT2-12W-CH-DF

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CLASS 1 DIV 2 · c UL us LISTED · IP69K · CE · KC

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 and capacitive touch screen options
- 1 USB-C port, 2 serial ports, dual Ethernet ports, 1 line-out audio port, and 1 microSD card slot
- High-brightness option with 99.9% UV protection
- Canvas software
- VNC Compatibility
- Class I Division 2 Hazardous rating (Extreme models)
- FDA 21 CFR Part 11 Compliance
- Embedded SQLite Database
- Email and text notifications

Supported Drivers

Client Device (Ethernet): EtherNet/IP (Allen-Bradley), EtherNet/IP (ODVA), Siemens S7, Mitsubishi MELSEC, Modbus TCP, OPC UA Client, Omron FINS, Proface GP, Fatek FBs, LSIS FEnet, CIMON PLC, ATIVA BACnet/IP, Beckhoff ADS/AMS, CODESYS V3, DNP3, Keyence Host Link

Client Device (Serial): Allen-Bradley DF-1, Mitsubishi MELSEC, Modbus RTU, LSIS Cnet, Omron HostLink, Panasonic FP7, Yokogawa FA-M3, CIMON PLC, ATIVA, DNP3, Hallim Loader, Keyence Host Link, Koyo DirectNET, User Protocol

Server Device (Ethernet): EtherNet/IP Server, MQTT JSON Publisher, Modbus TCP, OPC UA, Sparkplug Edge Node

Server Device (Serial): Modbus RTU



Functional

Touch Panel		5-Wire Resistive		10-Point Capacitive	
Type Part Number (CM-eXT2-...)		**Advanced** 12W-R-DF	**Extreme** 12W-RH-DF	**Advanced** 12W-C-DF	**Extreme** 12W-CH-DF
Enclosure	**Front**	Aluminum			
	Rear	Aluminum			
LCD Size		12.1 inch Wide TFT Color			
Colors		16.7M			
Resolution		1280 x 800 WXGA (16:10)			
Effective Display Area		261.12 x 163.2 mm			
PPI		125			
Backlight		LED			
Luminance		600 cd/m²	1,000 cd/m²	600 cd/m²	1,000 cd/m²
UV Protective Coating		-	99.9% UV Protection	-	99.9% UV Protection
Contrast Ratio		1000:1			
Backlight Life		50,000 Hours			
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		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)	21.2 W (Max: 22.7 W)	21.6 W (Max: 23W)
Operating System		Embedded Linux			
Project Memory		250 MB			
User Memory		4 GB			
Real-Time Clock		Built-in (CR2032 battery)			
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	IP66 / IP68 / IP69K (front), NEMA Type 4X, 12			
	Hazardous Rating	-	UL CID2	-	UL CID2

Environmental

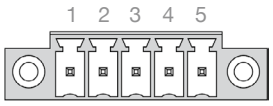
Type	Advanced	Extreme
Operating Temperature	-20 – +70°C (-4 – +158°F)	
Storage Temperature	-25 – +75°C (-13 – +167°F)	
Operating Humidity	10–90% RH (below 29°C, not condensed)	
Storage Humidity	10–90% RH (below 39°C, not condensed)	

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

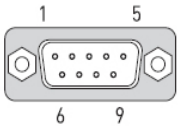
Connector



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	-	-

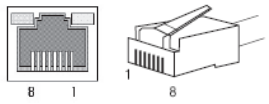
Connector



Ethernet

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

Connector



RJ45 Connector | RJ45 Jack

Accessories

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

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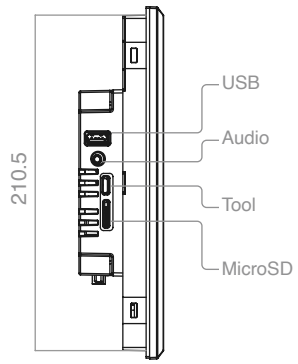
Physical

Type	Advanced	Extreme
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	2.4 kg (5.29 lbs)	
VESA (W x H)	75 mm x 75 mm (2.95 x 2.95 in)	

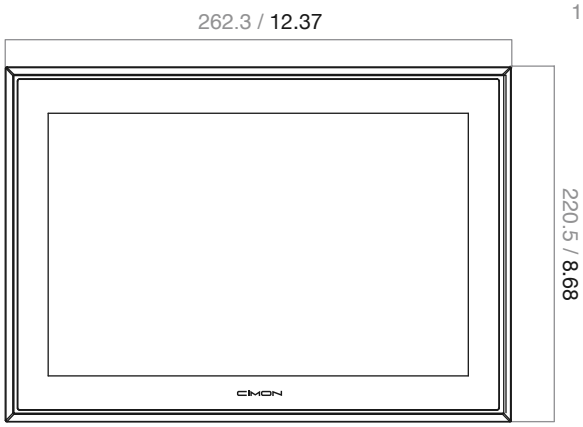
Spec Drawings

All eXT2-12 models

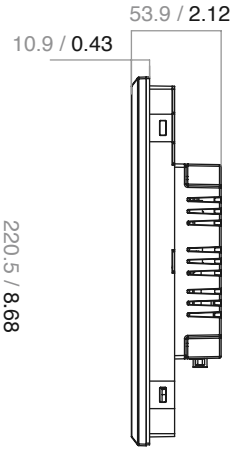
Units: mm / in



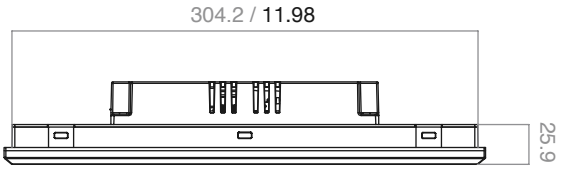
Left



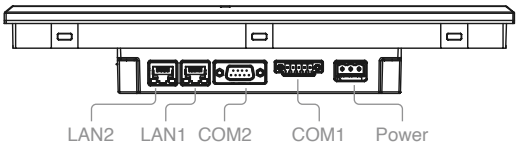
Front



Right

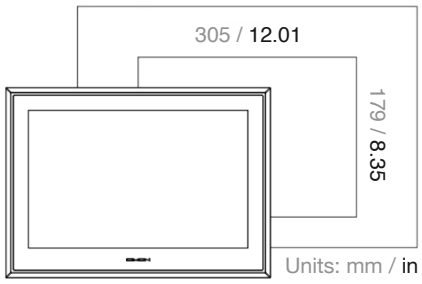


Top

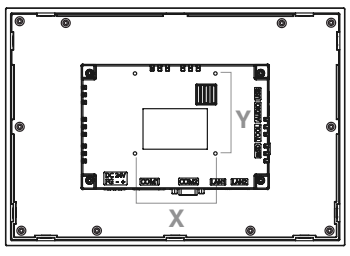


Bottom

Installation



Panel Cut



Units: mm / in

X: 75 / 2.95

Y: 75 / 2.95

Screw: M4 Max. 9

VESA Mount

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