eXT2 SERIES

7-Inch eXT2 HMI

The 7" eXT2 Series Xpanel HMI delivers robust performance in a compact design, certified for demanding industrial environments. With enhanced processing power, high-resolution visuals, and a sleek, lightweight profile, it's built to meet rigorous standards for both functionality and durability. The Advanced (DF) model further expands its versatility, offering enhanced connectivity and resilience for extreme conditions.

Base: CM-eXT2-07-R-DE

Advanced: CM-eXT2-07-R-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 of 1000 nits
- 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 Part Number		Base CM-eXT2-07-R-DE	Advanced CM-eXT2-07-R-DF
Enclosure	Front	Plastic	
	Rear	Plastic	
LCD Size		7 inch Wide TFT Color	
Colors		16.7M	
Resolution		1024 x 600 WSVGA (128:75)	
Effective Display Area (W x H)		154.21 x 85.92 mm	
PPI		170	
Backlight		LED	
Luminance		1,000 cd/m²	
Contrast Ratio		1000:1	
Backlight Life		50,000 Hours	
Touch Panel		4 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		-	One MicroSD card slot
COM 1		RS-422/485	
COM 2		RS-232C	
Ethernet		One 10/100/1000 port	Two 10/100/1000 ports
USB Host		One Type A	
Tool Port		One USB-C Device	
Audio		-	One Line-out port
Rated Voltage		24 VDC, Class 2	
Inrush Current		30 A maximum	
Power Consumption		12 W (Max: 14 W)	
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	Front: IP68, NEMA Type: 4X, 12

Environmental

Model	Base	Advanced
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
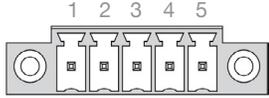
COM2: RS-232C

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
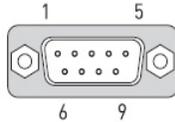
Ethernet

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

Connector

RJ45 Connector   RJ45 Jack
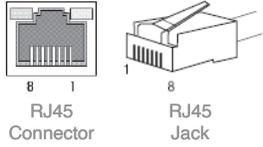
Physical

Model	Base	Advanced
Dimensions	185 x 127 x 51.9 mm (7.28 x 5.04 x 2.04 in)	
Panel Cut	177 x 119 mm (6.97 x 4.69 in)	
Weight	510 g (1.12 lbs)	
VESA (W x H)	N/A	

Accessories

Quantity	Description
4	Fastener
1	5-Pin Connector (RS-422/485)
1	Power Terminal Block
1	Installation Guide

Spec Drawings

Unit: mm

USB
Audio
Tool
MicroSD

117.4

Left

185

127

Front

51.9
10.9
2

Right

175.4

Top

LAN2   LAN1   COM2   COM1   Power

Bottom

Installation

177

119

Unit: mm

Panel Cut
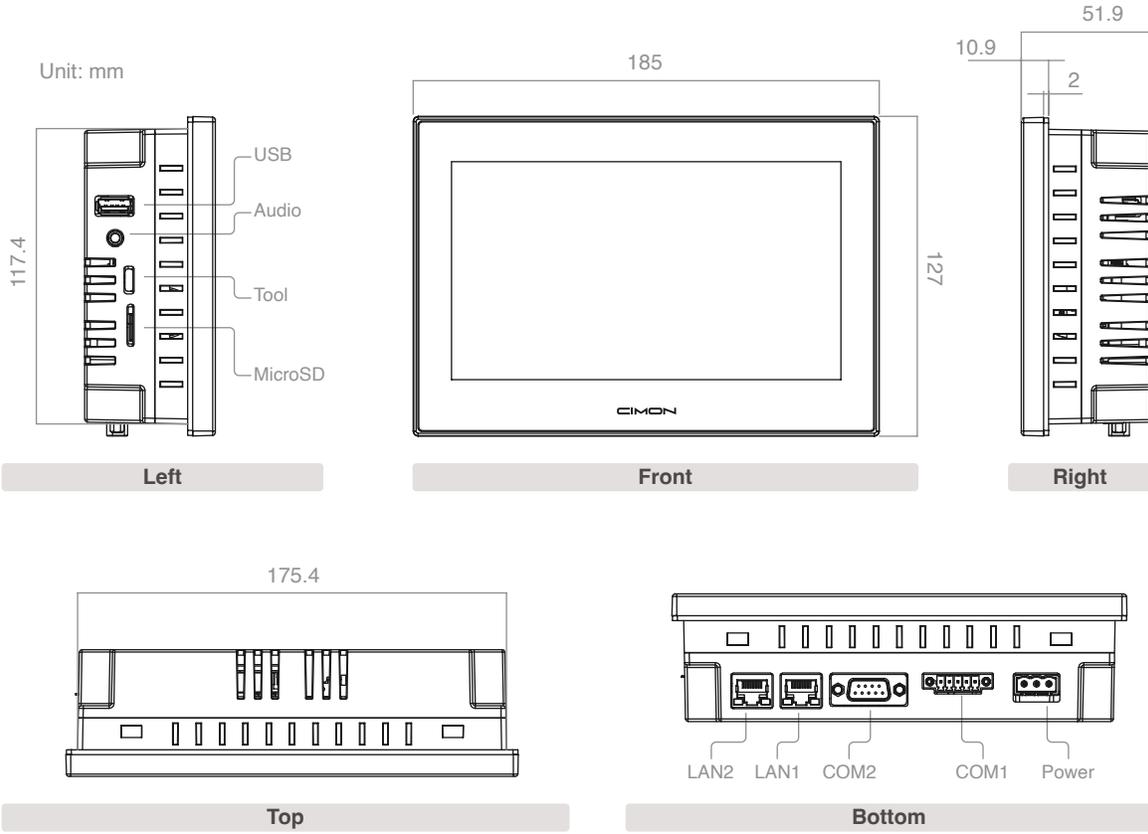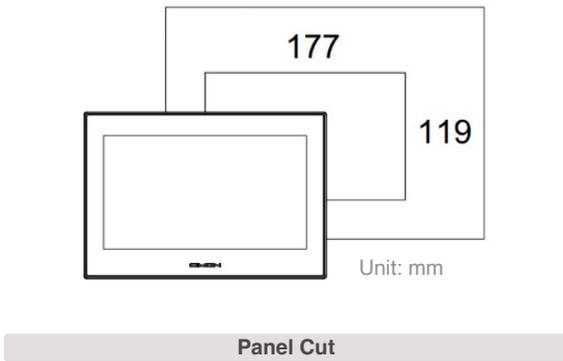
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