

› HMI Crouzet Touch - Performance Accessories for Millenium 3, Millenium EVO and em4

- › TFT-LCD resistive touch screen
- › 16.7 M colors display
- › New processor for faster data processing & displaying
- › PCB Coating Protection
- › Direct communication with M3 programming port
- › Modbus RS485 protocol (drivers for M3 and em4)
- › Modbus TCP/IP protocol (drivers for M3 and em4)
- › Integrated VNC server
- › Additional functions provided by Crouzet Touch programming software (e-mails, recipe database, enhanced security...)
- › CE, UKCA marks, cULus listed



CTP104-E & CTP104N-E Performance



CTP107-E Performance



CTP110-E & CTP110N-E Performance

Selection guide		
Type	Size	Part number
CTP104-E	4.3"	88 970 554
CTP104N-E		88 970 554N
CTP107-E	7"	88 970 564
CTP110-E	9.7"	88 970 574
CTP110N-E	10.1"	88 970 584

Accessories	
Interfaces and Expansions	Part number
Modbus RTU RS485 interface with Polarization Inside	88 980 122
Modbus RTU RS485 interface without Polarization Inside	89 980 123
Modbus RTU RS485 Millenium 3 expansion	88 972 250
Ethernet Millenium 3 expansion	88 970 270
Cables	Part number
Modbus RTU RS485 cable to Interface for CTP104-E and CTP104N-E	88 980 171
Modbus RTU RS485 cable to Interface for CTP107-E, CTP110-E and CTP110N-E	88 980 172
Modbus RTU RS485 cable to Millenium 3 expansion for CTP104-E and CTP104N-E	88 970 503
Modbus RTU RS485 cable to Millenium 3 expansion for CTP107-E, CTP110-E and CTP110N-E	88 970 504
Ethernet cable for em4 / Millenium EVO/ Millenium 3	89 970 508
Crouzet Touch Soft + programmation cables	88 970 591

	CTP104-E	CTP104N-E	CTP107-E	CTP110-E	CTP110N-E
Specific characteristics					
Part number	88 970 554	88 970 554N	88 970 564	88 970 574	88 970 584
Type	CTP104-E	CTP104N-E	CTP107-E	CTP110-E	CTP110N-E
Size	4.3"		7"	9.7"	10.1"
Resolution	480 x 272		800 x 480	1024 x 768	1024 x 600
Brightness	400 cd/m ²			350 cd/m ²	
On front panel color	Pantone Process Black C, Blue Pantone 285C				
Power consumption	300 mA @ 24 V, 88 mA @ 24V (backlight OFF)	450 mA @ 24 V	450 mA @ 24 V, 92 mA @ 24V (backlight OFF)	650 mA @ 24 V, 162 mA @ 24V (backlight OFF)	

	CTP104-E	CTP104N-E	CTP107-E	CTP110-E	CTP110N-E
Colors	16.7 M			262 K	16.7 M
LCD viewing angle (Top/Bottom/Left/Right)	30/50/50/50		70/50/70/70	60/70/70/70	60/70/80/80
Processor	32Bit RISC Cortex-A8, 600 MHz			32Bit RISC Cortex-A8, 1 GHz	
Storage memory	128 MByte			512 MByte	4 GByte
RAM memory	128 MByte			256 MByte	1 GByte
USB	Host USB 2.0				
Ethernet	RJ45 type, 10/100 Mbit/s, MDI/MDIX			2 x RJ45 type, 10/100/1000 Mbit/s, MDI/MDIX	
Wifi	N/A				
Port RS232	COM1 male			COM1 male, COM3 male. Only Tx & Rx (no RTS/CTS) may be used for COM1 when COM3 is also used.	
Port RS485	COM1 2/4 Wires male, COM3 2 Wires male			COM2 2/4 Wires female, COM3 2 Wires female	
CAN bus	N/A			N/A	
UL Certification	cULus Listed			N/A	
Weight	Approximately 0.25 kg		Approximately 0.6 kg	Approximately 0.85 kg	Approximately 1.2 kg
Dimensions (W x H x D)	128 x 102 x 32 mm / 5.04 x 4.02 x 1.26"		200.3 x 146.3 x 34 mm / 7.89 x 5.77 x 1.34 "	260.6 x 203.1 x 36.5 mm /10.26 x 8 x 1.44 "	271 x 213 x 43 mm /10.67 x 8.39 x 1.69 "
Vesa Mount	N/A			75 x 75 mm / 2.95 x 2.95"	
Panel cutout	119 x 93 mm / 4.69 x 3.66"		192 x 138 mm / 7.56 x 5.43 "	250 x 192 mm / 9.84 x 7.56 "	260 x 202 mm / 10.24 x 7.95 "
PCB Coating	Yes				

General characteristics

Enclosure	Plastic				
Products certification	CE, UKCA			CE	CE, UKCA
Nominal voltage	24 V $\overline{\text{---}}$ (-20% / +20%)	22-28 V $\overline{\text{---}}$	24 V $\overline{\text{---}}$ (-20% / +20%)		
Operating limits	19.2 - 28.8 V $\overline{\text{---}}$	22-28 V $\overline{\text{---}}$	19.2 - 28.8 V $\overline{\text{---}}$		
Power isolation	Yes				
Power supply earthing	Yes				
Voltage resistance	500 V \sim (1 minute)				
Isolation resistance	> 50 Mohms at 500 V $\overline{\text{---}}$				
Vibration endurance	10 to 25 Hz (X,Y,Z direction 2G 30 minutes)				
Conducted and radiated emissions	EN 55022: 2010 +AC: 2011 class A CISPR 22: 2008		EN 55022: 2010 +AC: 2011 class B CISPR 22: 2008	EN 55022: 2010 +AC: 2011 class A CISPR 22: 2008	
Electro-Magnetic Interference, harmonic current	EN 61000-3-2: 2014				
Electro-Magnetic Interference, voltage flicker	EN 61000-3-3: 2013				
Resistance to electrostatic discharge	Immunity to ESD IEC/EN 61000-4-2: 2008				
Resistance to HF interference (Immunity) (EN55024: 2010)	Immunity to radiated electrostatic fields IEC/EN 61000-4-3: 2010 Immunity to fast transients (burst immunity) IEC/EN 61000-4-4: 2012 Immunity to shock waves IEC/EN 61000-4-5: 2014 Radio frequency in common mode IEC/EN 61000-4-6: 2013 Immunity to magnetic field IEC/EN 61000-4-8: 2009				
Voltage dip, interruption	IEC/EN 61000-4-11: 2004				
Protection against electric shock	Class II equipment				
Mount	Built-in, fixing by screw clamps (supplied) for 1 to 6 mm panel				
Connection	Removable 3-pin screw terminal block (supplied)				
Protection rating	NEMA4 / IP 65 Compliant front panel				NEMA4 / IP 66 Compliant front panel

	CTP104-E	CTP104N-E	CTP107-E	CTP110-E	CTP110N-E
Operation temperature	0 (32 °F) → +50 °C (122 °F)		0 (32 °F) → +45 °C (113 °F)	0 (32 °F) → +50 °C (122 °F)	
Storage temperature	-20 (-4 °F) → +60 °C (140 °F)				
Relative humidity	10 → 90% max. (no condensation or dripping water)				

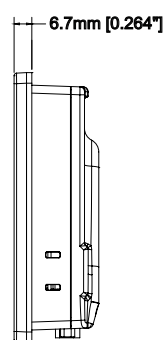
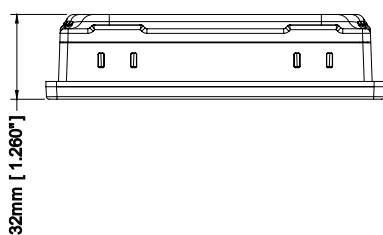
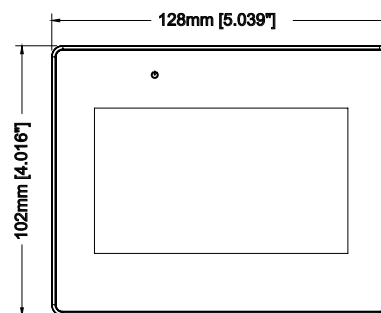
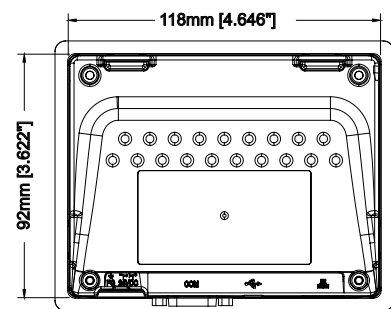
Display

Type	TFT LCD
Contrast ratio	500: 1
Backlight type	Led
Backlight life time	> 30.000 Hours
Touch panel: type	4 wires resistive, with user-definable layout
Touch panel: key life	1 million operations minimum
Accuracy	Active Area Length(X)±2%, Width(Y)±2%
Driver Millenium 3	SLIN/SLOUT 24 V--, XN05, XN06
Driver em4	Modbus RS485 & TCP/IP
Driver Modbus IDA	ASCII, RTU & TCP/IP
RTC	Use Millenium 3, em4 or build-in clock
RTC battery	CR2032
RTC time life battery	> 5 years, not rechargeable

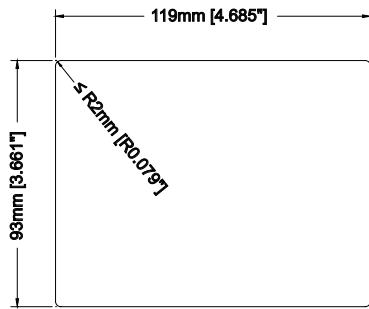
Schemes

Dimensions

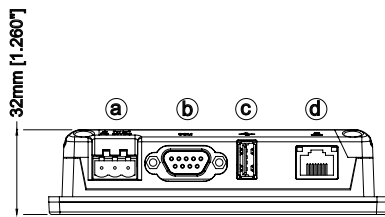
CTP104-E & CTP104N-E



Panel cutout

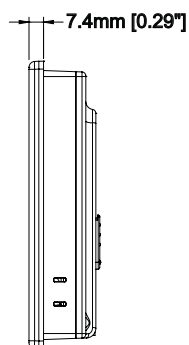
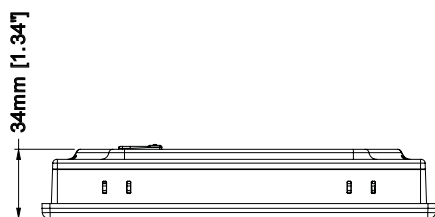
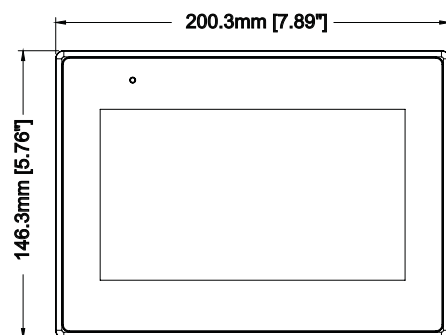
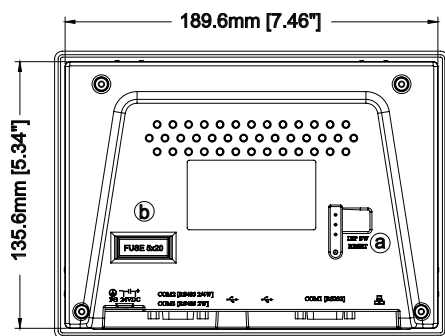


Connexion

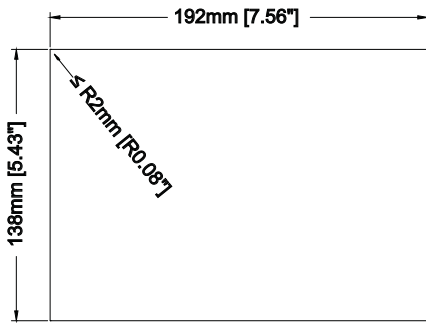


a	Power Connector
b	COM1 RS232, RS485. COM3 RS485
c	USB Host
d	Ethernet

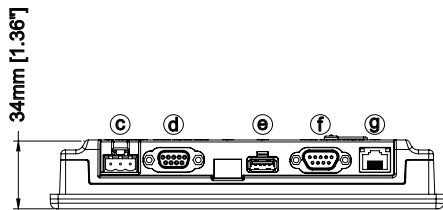
CTP107-E



Panel cutout

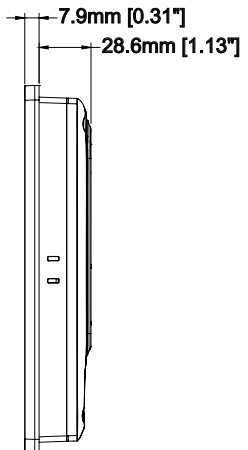
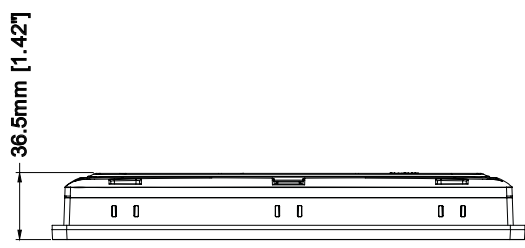
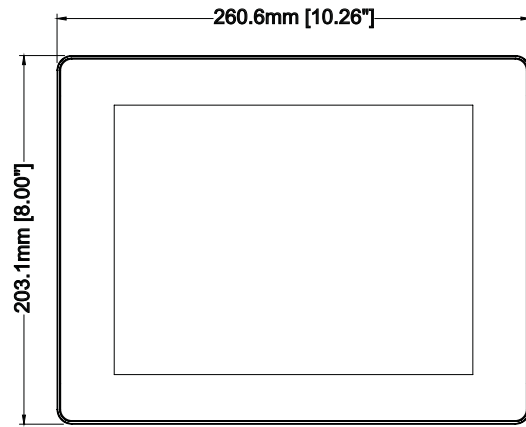
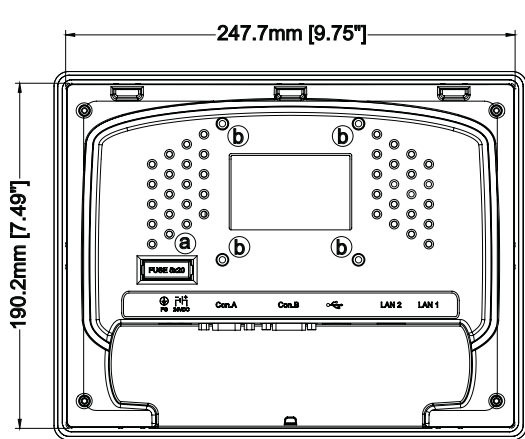


Connexion

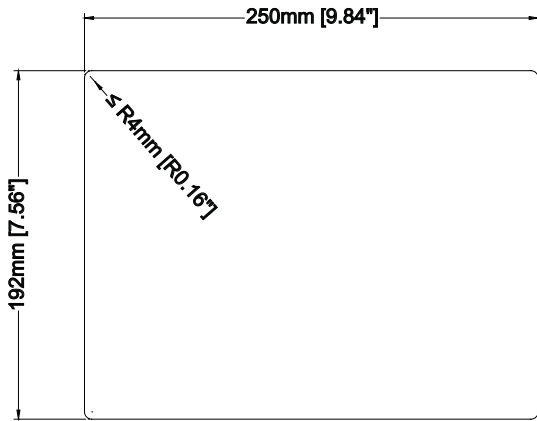


c	Power Connector
d	COM2 RS485. COM3 RS485
e	USB Host
f	COM1 RS232
g	Ethernet

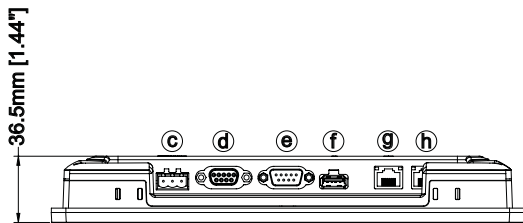
CTP110-E



Panel cutout

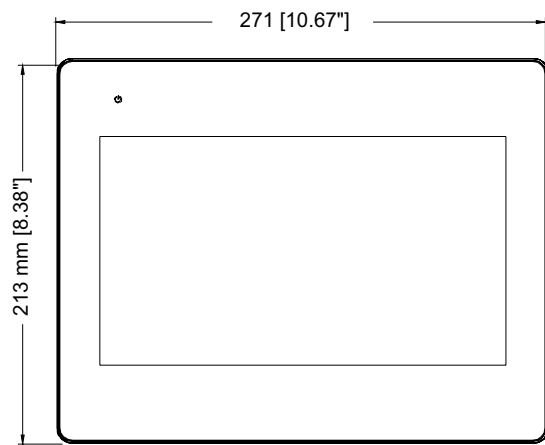
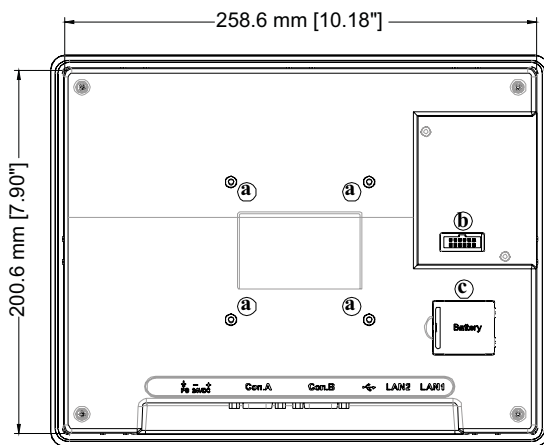


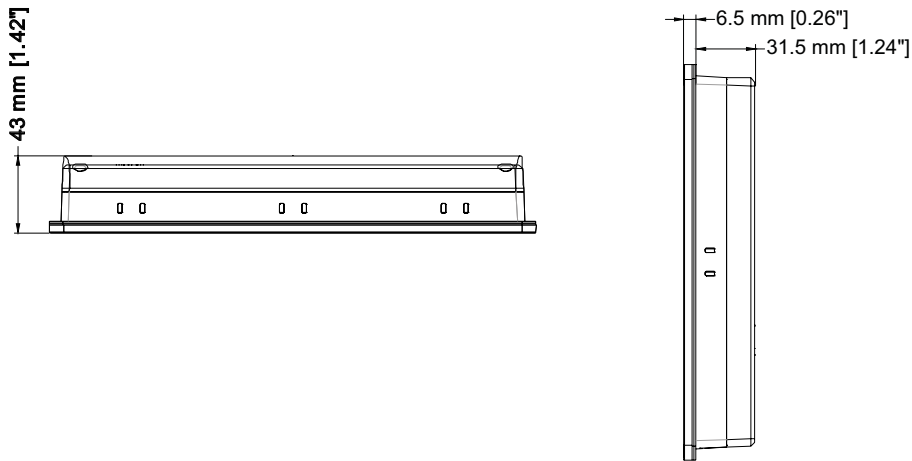
Connexion



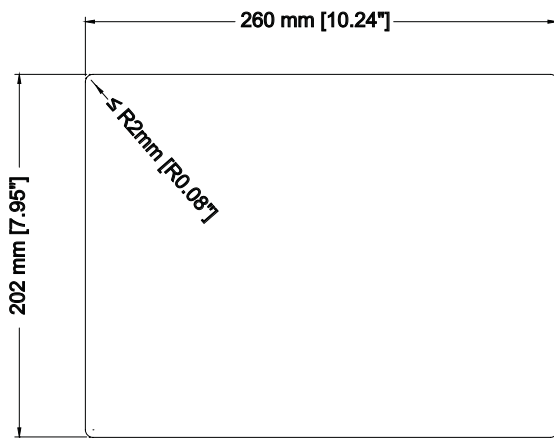
c	Power Connector
d	COM2 RS485. COM3 RS485
e	COM1 RS232. COM3 RS232
f	USB Host
g	Ethernet LAN 2
h	Ethernet LAN 1

CTP110N-E

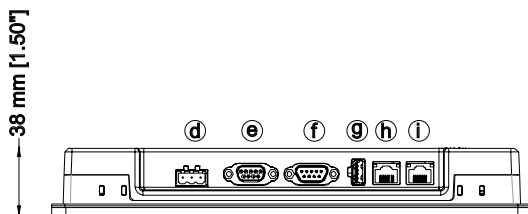




Panel cutout



Connexion



c	Battery
d	Power Connector
e	COM2 RS485 2W/4W, COM3 RS485 2W
f	COM1 RS232 4W, COM3 RS232 2W
g	USB Host Port
h	Ethernet LAN 2
i	Ethernet LAN 1

Warning:

The product information contained in this catalogue is given purely as information and does not constitute a representation, warranty or any form of contractual commitment. Crouzet and its subsidiaries reserve the right to modify their products without notice. It is imperative that we should be consulted over any particular use or application of our products and it is the responsibility of the buyer to establish, particularly through all the appropriate tests, that the product is suitable for the use or application. Under no circumstances will our warranty apply, nor shall we be held responsible for any application (such as any modification, addition, deletion, use in conjunction with other electrical or electronic components, circuits or assemblies, or any other unsuitable material or substance) which has not been expressly agreed by us prior to the sale of our products.