

FP7 Series HMI

FP710R



Product Overview

FP7 series HMI is Flexematic's new-generation intelligent IoT HMI. Built-in IoT feature continues the cost-effective IoT application solution that has been supported easily. New design to improve overall product design. Dual Gigabit Ethernet port configurations greatly improve the speed of Ethernet traffic. High-resolution LCD configuration and HDMI interface as standard for high-definition video content playback. Available in a variety of sizes to meet the needs of different application scenarios.

Product Specifications

1. Hardware Parameters

Display	10.1" 16:10 TFT LCD
LCD Viewing Angles (T/B/L/R)	85'/85'/85'/85'
Resolution	1280× 800
Colors	24-bit
Brightness	400 cd/m ²
Backlight Type	LED
LCD Lifetime	50000 hours
Touch Panel	4-wire industrial resistive touchscreen
CPU	4-core 64-bit Cortex-A55 processor , clock speed:2.0GHz
GPU	Mali G52
Storage	16GB EMMC+2GB DDR4
RTC	Built-in
Ethernet	2*Gigabit Ethernet(10/100/1000M)
USB Port	2*USB3.0 Type-A port
HDMI Port	HDMI 2.0a port,support 1080P display
Serial Port	COM1:RS232/RS485/RS422; COM3:RS232;COM2:RS485/RS422
WiFi	Depend on the choice of the user
4G	Depend on the choice of the user

2. Electrical specification

Rated Power	< 10W
Input Power	DC24V,input range: 18V~28V
Power Protection	With lightning surge protection
Power Interruption Tolerance	< 5mS
Certification	EN61000-6-2:2005, EN61000-6-4:2007 standards certified; RoHS certified;Lighting surge:±1kV;Surge cluster:±2 kV;Contact ESD:4 kV;Air ESD:8 kV

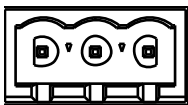
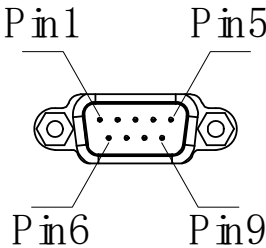
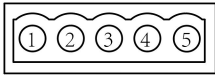



3. Environmental requirements



Operating Temperature	-10~60℃
Storage Temperature	-20~70℃
UV Resistance	Operating in high UV environment is prohibited (e.g., in direct sunlight)
Environmental Humidity	10~90%RH(non-condensing)
Vibration Endurance	10~25Hz(X、Y、Z direction, 2G / 30 minutes)
Cooling Method	Natural Cooling

4. Mechanical requirements

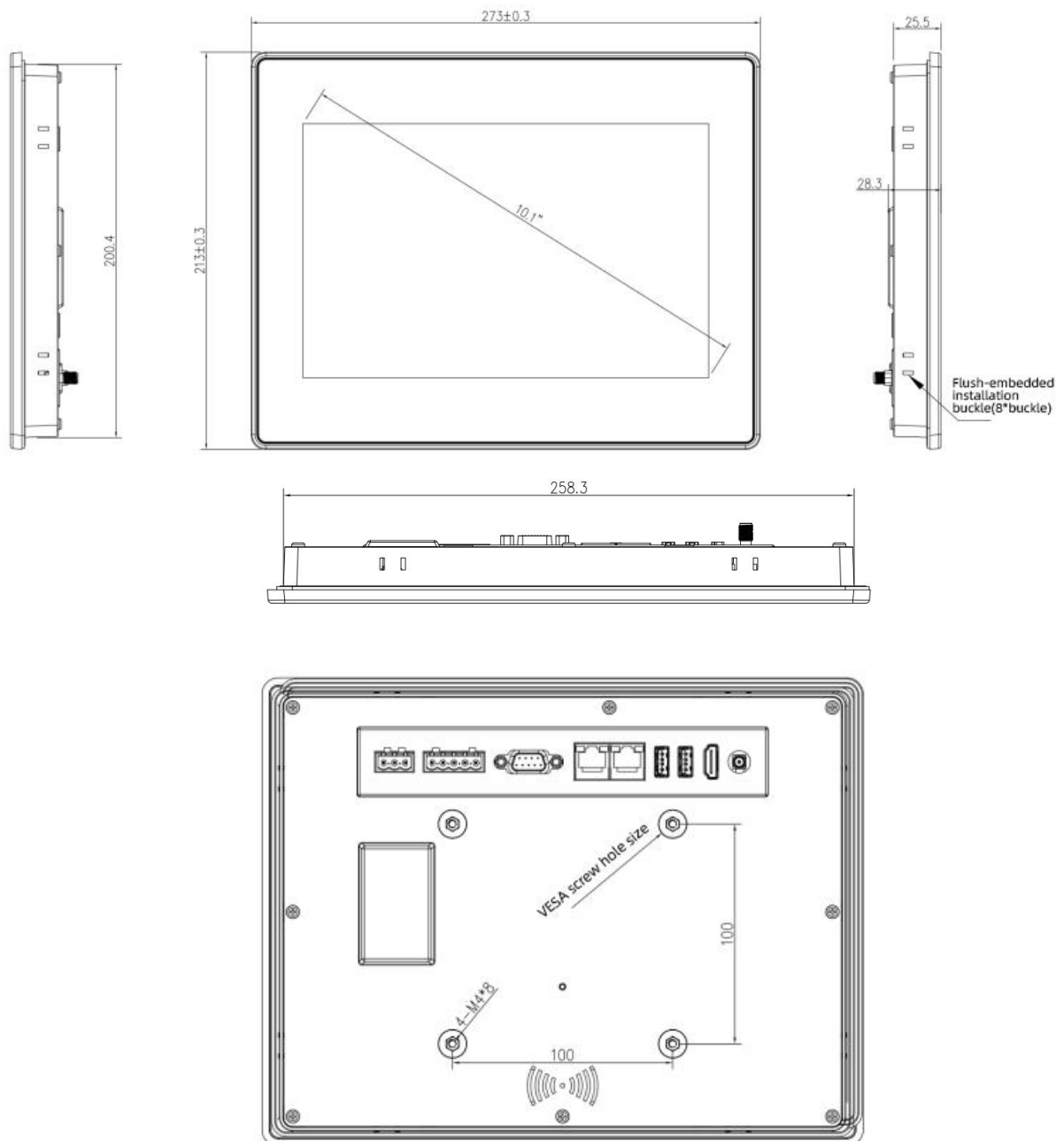
Installation Method	Flush-mounted installation/VESA installation
Protection Level	Front: IP65 (with NEMA enclosure) , Rear: IP20
Enclosure material	Non-ferrous alloys
Cutout Dimensions	260mm×202mm
Overall Dimensions	274mm×214mm×27mm
Weight	About 1450g

Wiring Definition

Power Terminal (Pin1~3 from left to right)		
	Pin1	DC24V
	Pin2	GND
	Pin3	FG
DB9 Port(COM1/COM3)		
	Pin1	Rx-(B) (COM1 RS422/485-)
	Pin2	RxD (COM1 RS232)
	Pin3	TxD (COM1 RS232)
	Pin4	Tx- (COM1 RS422)
	Pin5	GND
	Pin6	Rx+(A) (COM1 RS422/485+)
	Pin7	RxD (COM3 RS232)
	Pin8	TxD (COM3 RS232)
	Pin9	Tx+ (COM1 RS422)
	Pin1	Rx-(B) (COM1 RS422/485-)
COM2 Port (Pin1~5 from left to right)		
	Pin1	Rx+(A) (COM2 RS422/485+)
	Pin2	Rx-(B) (COM2RS422/485-)
	Pin3	GND
	Pin4	Tx+ (COM2 RS422)
	Pin5	Tx- (COM2 RS422)
USB Host Port		
	USB Type A 3.0	For peripheral devices, such as flash drive or bar code scanner, etc.
USB OTG Port		
	USB Type A 3.0	For program downloading and debugging. For peripheral devices, such as flash drive or bar code scanner, etc.
HDMI Port		
	HDMI 2.0a	Support 1080P display.

Ethernet port*2		
	RJ45	Used for Ethernet setup with controllers or to connect servers
Antenna Port (Optional)		
	Antenna Socket	SMA antenna port

Dimension drawings



Cutout dimensions of flush-mounted installation: 260 mm * 202 mm