



Features:

- Modular design available in sizes from 10.1 to 27 inches, supporting both square and widescreen formats.
- Ten-point capacitive touch screen.
- All-plastic mold middle frame with a front panel designed to IP65 standards.
- Utilizes the Intel® Celeron® J6412 low-power CPU.
- Integrated dual Intel® Gigabit network cards.
- Supports dual hard drive storage.
- Compatible with APQ aDoor module expansion.
- Supports WiFi/4G wireless expansion.
- Fanless design for silent operation.
- Embedded/VESA mounting options.
- Powered by 12~28V DC supply.



Remote Management



Status Monitoring



Remote Operations
and Maintenance

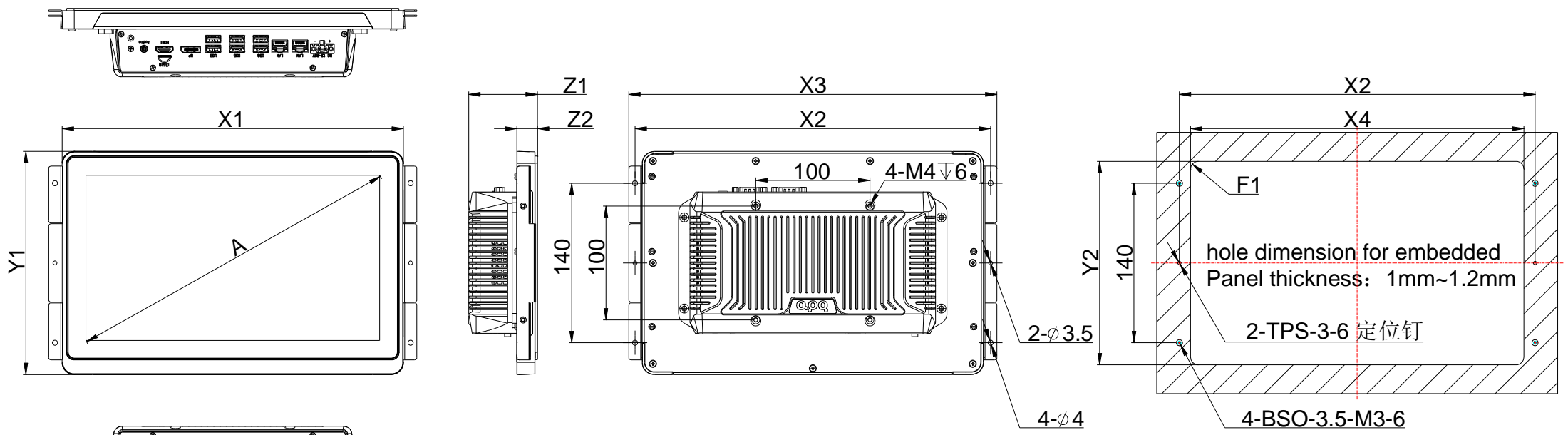


Security Control

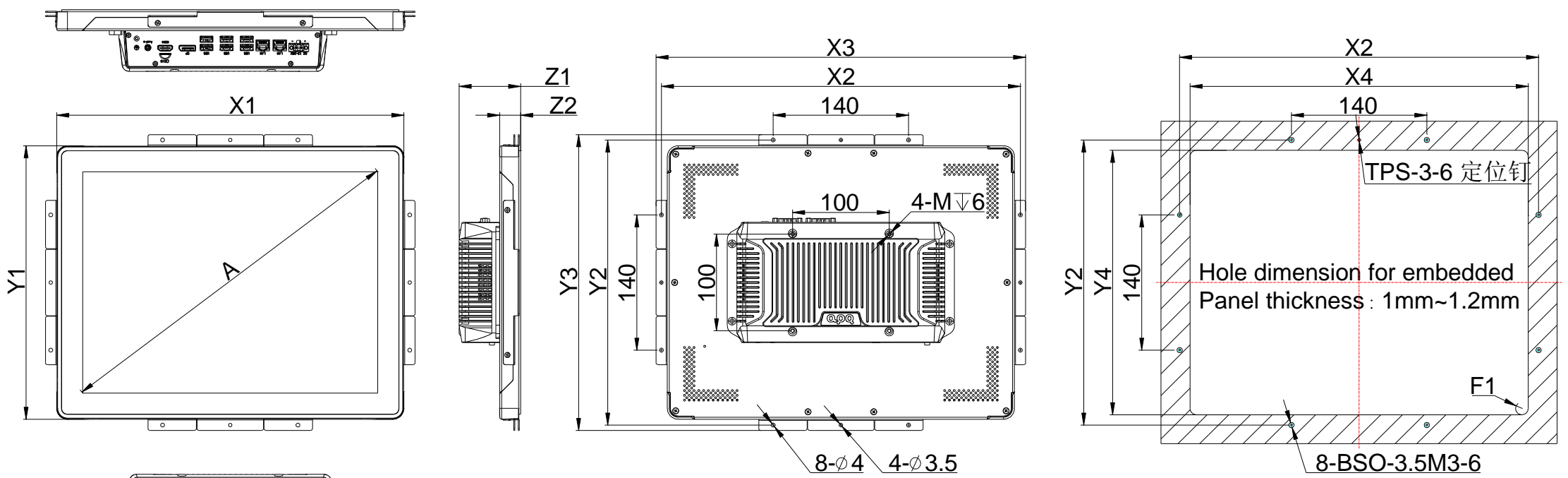
Product Specifications

Model	PH101CL-E5S	PH116CL-E5S	PH133CL-E5S	PH150CL-E5S	PH156CL-E5S	PH170CL-E5S	PH185CL-E5S	PH190CL-E5S	PH215CL-E5S	PH238CL-E5S	PH270CL-E5S	
LCD	Display Size	10.1"	11.6"	13.3"	15.0"	15.6"	17.0"	18.5"	19.0"	21.5"	23.8"	27"
	Display Type	WXGA TFT-LCD	FHD TFT-LCD	FHD TFT-LCD	XGA TFT-LCD	WXGA TFT-LCD	SXGA TFT-LCD	WXGA TFT-LCD	SXGA TFT-LCD	FHD TFT-LCD	FHD TFT-LCD	FHD TFT-LCD
	Max.Resolution	1280 x 800	1920 x 1080	1920 x 1080	1024 x 768	1920 x 1080	1280 x 1024	1366 x 768	1280 x 1024	1920 x 1080	1920 x 1080	1920 x 1080
	Aspect Ratio	16:10	16:9	16:9	4:3	16:9	5:4	16:9	5:4	16:9	16:9	16:9
	Viewing Angle	85/85/85/85	89/89/89/89	85/85/85/85	89/89/89/89	85/85/85/85	85/85/80/80	85/85/80/80	85/85/80/80	89/89/89/89	89/89/89/89	89/89/89/89
	Luminance	350 cd/m2	220 cd/m2	300 cd/m2	350 cd/m2	220 cd/m2	250 cd/m2	250 cd/m2	250 cd/m2	250 cd/m2	250 cd/m2	300 cd/m2
	Contrast Ratio	800:1	800:1	800:1	1000:1	800:1	1000:1	1000:1	1000:1	1000:1	1000:1	3000:1
	Backlight Lifetime	25,000 Hrs	15,000 Hrs	15,000 Hrs	50,000 Hrs	50,000 Hrs	50,000 Hrs	30,000 Hrs	30,000 Hrs	30,000 Hrs	30,000 Hrs	30,000 Hrs
Touchscreen	Touch Type	Projected Capacitive Touch										
	Touch Controller	USB										
	Input	Finger/Capacitive Touch Pen										
	Light Transmission	≥85%										
	Response time	< 10ms										
Processor System	CPU	Intel® Celeron® J6412										
	Base Frequency	2.00 GHz										
	Max Turbo Frequency	2.60 GHz										
	Cache	1.5MB										
	Total Cores/Threads	4/4										
	TDP	10W										
	Chipset	SOC										
Memory	Socket	LPDDR4 3200 MHz (Onboard)										
	Capacity	8GB										
Graphics	Controller	Intel® UHD Graphics										
Ethernet	Controller	2 * Intel® i210-AT (10/100/1000 Mbps, RJ45)										
Storage	SATA	1 * SATA3.0 Connector (2.5-inch hard disk with 15+7Pin)										
	M.2	1 * M.2 Key-M Slot (SATA SSD, 2280)										
Expansion Slots	aDoor	1 * aDoor										
	Mini PCIe	1 * Mini PCIe Slot (PCIe2.0x1+USB2.0)										
Front I/O	USB	4 * USB3.0 (Type-A) 2 * USB2.0 (Type-A)										
	Ethernet	2 * RJ45										
	Display	1 * DP++: max resolution up to 4096x2160@60Hz 1 * HDMI (Type-A): max resolution up to 2048x1080@60Hz										
	Audio	1 * 3.5mm Jack (Line-Out + MIC, CTIA)										
	SIM	1 * Nano-SIM Card slot (Mini PCIe module provides functional support)										
	Power	1 * Power Input Connector (12~28V)										
Rear I/O	Button	1 * Power Button with Power LED										
	Serial	2 * RS232/485 (COM1/2, DB9/M, BIOS control)										
Internal I/O	Front Panel	1 * Front Panel (3x2Pin, PHD2.0)										
	FAN	1 * SYS FAN (4x1Pin, MX1.25)										
	Serial	2 * COM (JCOM3/4, 5x2Pin, PHD2.0) 2 * COM (JCOM5/6, 5x2Pin, PHD2.0)										
	USB	2 * USB2.0 (F_USB2_1, 5x2Pin, PHD2.0) 2 * USB2.0 (F_USB2_2, 5x2Pin, PHD2.0)										
	Display	1 * LVDS/eDP (default LVDS, wafer, 25x2Pin 1.00mm)										
	Audio	1 * Speaker (2-W (per channel)/8-Ω Loads, 4x1Pin, PH2.0)										
	GPIO	1 * 16bits DIO (8xDI and 8xDO, 10x2Pin, PHD2.0)										
Power Supply	LPC	1 * LPC (8x2Pin, PHD2.0)										
	Type	DC										
	Power Input Voltage	12~28VDC										
	Connector	1 * 2Pin Power Input Connector (12~28V, P= 5.08mm)										
OS Support	RTC Battery	CR2032 Coin Cell										
	Windows	Windows 10										
Watchdog	Linux	Linux										
	Output	System Reset										
Mechanical	Interval	Programmable 1 ~ 255 sec										
	Enclosure Material	Panel: Plastics, Radiator: Aluminum, Cover/Box: SGCC										
	Mounting	VESA, embedded										
Environment	Dimensions (L*W*H, Unit: mm)	249.8*168.4*53	298.1*195.8*60	333.7*216*58.2	359*283*63.8	401.5*250.7*60.7	393*325.6*63.8	464.9*285.5*63.7	431*355.8*63.8	532.3*323.7*63.7	585.4*357.7*63.7	662.3*400.9*63.7
	Weight	Net: 2.2kg, Total: 3.4kg	Net: 2.5kg, Total: 3.8kg	Net: 2.7kg, Total: 4kg	Net: 3.9kg, Total: 5.4kg	Net: 4kg, Total: 5.6kg	Net: 4.9kg, Total: 6.6kg	Net: 5 kg, Total: 6.7kg	Net: 5.8kg, Total: 7.6kg	Net: 6kg, Total: 7.9kg	Net: 7.6kg, Total: 9.5kg	Net: 8.7kg, Total: 10.8kg
Environment	Heat Dissipation System	Passive heat dissipation										
	Operating Temperature	0~50°C										
	Storage Temperature	-20~60°C										
	Relative Humidity	10 to 95% RH (non-condensing)										
Vibration During Operation	With SSD: IEC 60068-2-64 (1Grms@5~500Hz, random, 1hr/axis)											

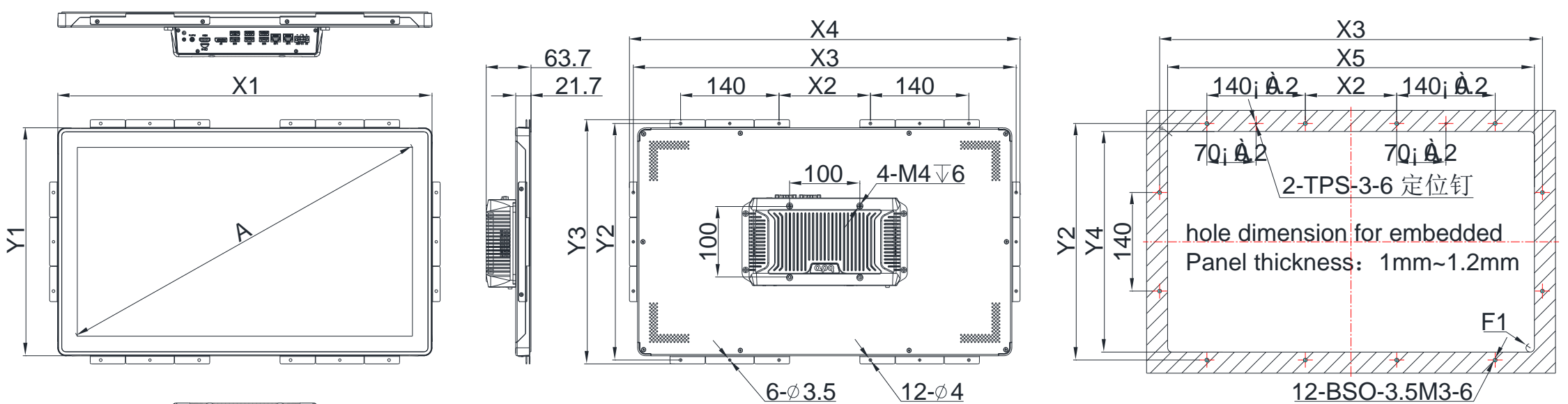
Product Dimensions



A	System Dimension			Panel Mount				
	X1	Y1	Z1	X2	Y2	Z2	X3	F1
10.1"	249.8	168.4	53	263.9	168.4	11	273.9	10.5
11.6"	298.8	195.8	60	311.3	178.7	18	322.3	6.9
13.3"	333.7	216	58.2	346.9	197.3	16.2	357.7	6



A	System Dimension			Panel Mount							
	X1	Y1	Z1	X2	Y2	Z2	X3	Y3	X4	Y4	F1
15.0"	359	283	63.8	371.2	295.1	21.8	382.2	306.1	349.7	273.7	6.5
15.6"	401.5	250.7	60.7	413.9	263.1	18.7	424.9	274.1	389.1	238.3	6
17.0"	393	325.6	63.8	405.2	337.8	21.8	416.2	348.8	383	315.5	6
18.5"	464.9	285.5	63.7	476.9	297.5	21.7	487.9	308.5	454.3	274.9	6
19.0"	431	355.8	63.8	443.2	367.9	21.8	454.2	378.9	420.5	345.2	6



A	System Dimension			Panel Mount								
	X1	Y1	Z1	X2	Y2	Z2	X3	Y3	X4	Y4	X5	F1
21.5"	532.3	323.7	63.7	130	335.8	21.7	544.4	346.8	555.4	313.1	521.6	6
23.8"	585.4	357.7	63.7	130	369.8	21.7	597.5	380.8	608.5	347.1	574.8	6
27.0"	662.3	400.9	63.7	190	413.2	21.7	674.6	424.2	685.6	390.5	651.9	6

Product I/O

