

Features:

- Modular design with options from 15 to 27 inches, supporting both square and widescreen displays.
- Ten-point capacitive touchscreen.
- All-plastic mold middle frame with a front panel designed to IP65 standards.
- Supports Intel® 4th/5th Gen Core / Pentium/ Celeron Desktop CPUs, with a TDP of 35W.
- Equipped with the Intel® H81 chipset.
- Two Intel Gigabit network interfaces and four DB9 serial ports.
- M.2 and 2.5-inch dual hard drive slots for storage support.
- Four display outputs: VGA, DVI-D, DP++, and internal LVDS, supporting up to 4K@60Hz resolution.
- 9~36V DC power supply (with an option for 12V).
- Embedded/VESA mounting options.



Remote Management



Status Monitoring



Remote Operations and Maintenance



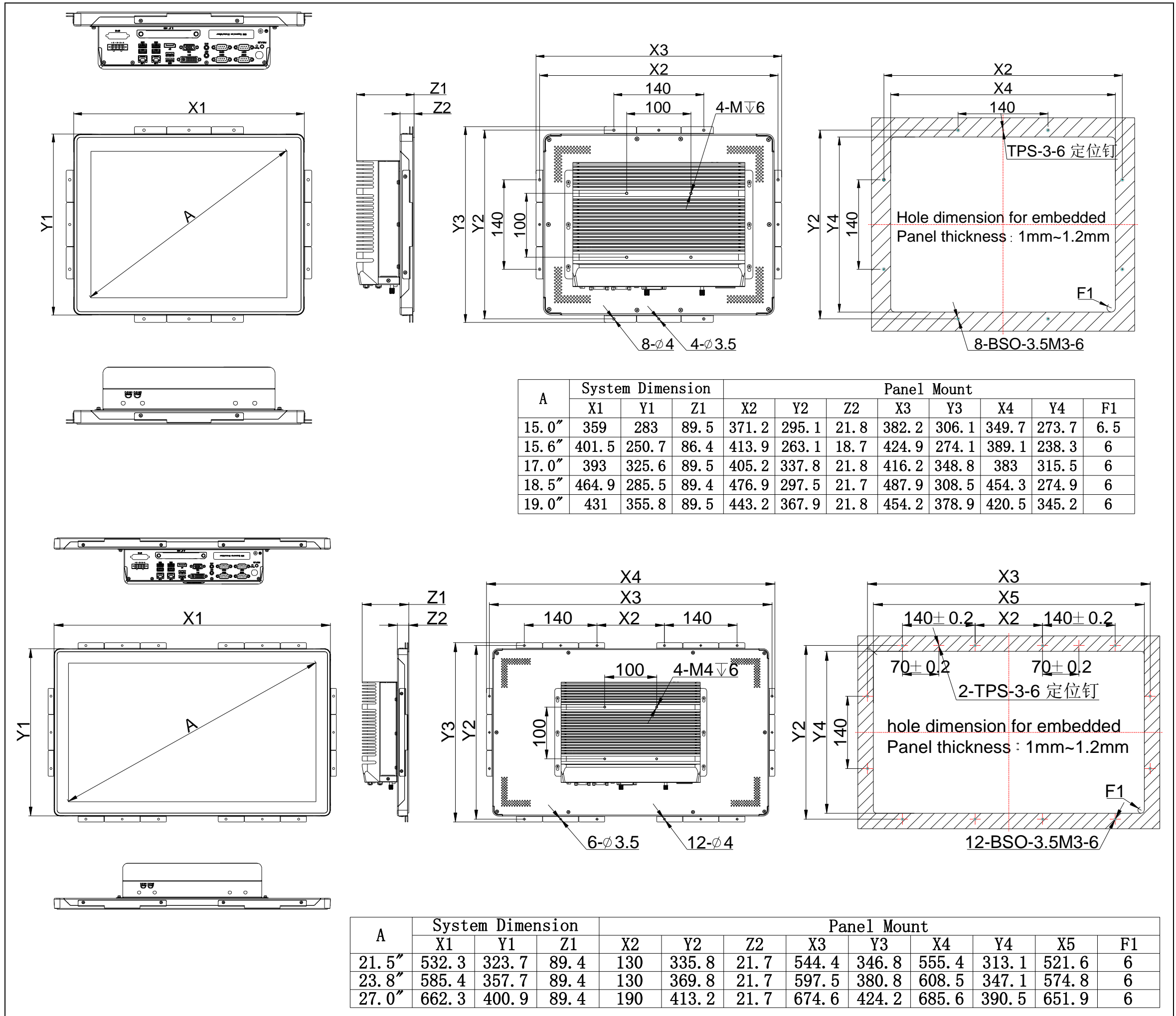
Security Control

Product Specifications

Model	PH150CL-E7L	PH156CL-E7L	PH170CL-E7L	PH185CL-E7L	PH190CL-E7L	PH215CL-E7L	PH238CL-E7L	PH270CL-E7L	
LCD	Display Size	15.0"	15.6"	17.0"	18.5"	19.0"	21.5"	23.8"	27"
	Display Type	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	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	4:03	16:09	5:04	16:09	5:04	16:09	16:09	16:09
	Viewing Angle	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	250 cd/m2	250 cd/m2	250 cd/m2	250 cd/m2	250 cd/m2	300 cd/m2
	Contrast Ratio	1000:01:00	800:01:00	1000:01:00	1000:01:00	1000:01:00	1000:01:00	1000:01:00	3000:01:00
	Backlight Lifetime	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							
	Controller	USB Signal							
	Input	Finger/Capacitive Touch Pen							
	Light Transmission	≥85%							
	Hardness	≥6H							
Processor System	CPU	Intel® 4/5th Generation Core / Pentium/ Celeron Desktop CPU							
	TDP	35W							
	Socket	LGA1150							
	Chipset	Intel® H81							
	BIOS	AMI UEFI BIOS (Support Watchdog Timer)							
Memory	Socket	2 * Non-ECC SO-DIMM Slot, Dual Channel DDR3 up to 1600MHz							
	Max Capacity	16GB, Single Max. 8GB							
Graphics	Controller	Intel® HD Graphics							
Ethernet	Controller	1 * Intel i210-AT GbE LAN Chip (10/100/1000 Mbps) 1 * Intel i218-LM/V GbE LAN Chip (10/100/1000 Mbps)							
	Storage	1 * SATA3.0, Quick release 2.5" hard disk bays (T≤7mm) 1 * SATA2.0, Internal 2.5" hard disk bays (T≤9mm, Optional)							
Expansion Slots	SATA	1 * M.2 Key-M (SATA3.0, 2280)							
	MXM/aDoor	1 * APQ MXM (Optional MXM 4 * LAN/4 * POE/6 * COM/16 * GPIO expansion card) 1 * aDoor Expansion Slot							
Front I/O	Mini PCIe	1 * Mini PCIe (PCIe2.0 x1 (Share PCIe signal with MXM, optional) + USB 2.0, with 1*Nano SIM Card)							
	Ethernet	2 * RJ45							
	USB	2 * USB3.0 (Type-A, 5Gbps) 4 * USB2.0 (Type-A)							
	Display	1 * DVI-D: max resolution up to 1920*1200 @ 60Hz 1 * VGA (DB15/F): max resolution up to 1920*1200 @ 60Hz 1 * DP: max resolution up to 4096*2160 @ 60Hz							
	Audio	2 * 3.5mm Jack (Line-Out + MIC)							
	Serial	2 * RS232/422/485 (COM1/2, DB9/M, Full Lanes, BIOS Switch) 2 * RS232 (COM3/4, DB9/M)							
	Button	1 * Power Button + Power LED 1 * System Reset Button (Hold down 0.2 to 1s to restart, and hold down 3s to clear CMOS)							
Rear I/O	Antenna	4 * Antenna hole							
	SIM	1 * Nano SIM card slot (SIM1)							
Internal I/O	USB	2 * USB2.0 (wafer)							
	LCD	1 * LVDS (wafer): max resolution up to 1920*1200 @ 60Hz							
	TFront Panel	1 * TF_Panel (3 * USB 2.0 + FPANEL, wafer)							
	Front Panel	1 * Front Panel (PWR + RST + LED, wafer)							
	Speaker	1 * Speaker (2-W (per channel)/8-Ω Loads, wafer)							
	Serial	2 * RS232 (COM5/6, wafer)							
	GPIO	1 * 16 bits DIO (8xDI and 8xDO, wafer)							
	LPC	1 * LPC (wafer)							
SATA	2 * SATA 7P Connector								

	SATA Power	2 * SATA Power (SATA_PWR1/2, wafer)							
	FAN	1 * CPU FAN (wafer) 2 * SYS FAN (wafer)							
Power Supply	Type	DC, AT/ATX							
	Power Input Voltage	9 ~ 36VDC, P≤240W							
	Connector	1 * 4Pin Connector, P=5.00/5.08							
	RTC Battery	CR2032 Coin Cell							
OS Support	Windows	Windows 7/10/11							
	Linux	Linux							
Watchdog	Output	System Reset							
	Interval	Programmable via Software from 1 to 255 sec							
Mechanical	Enclosure Material	Radiator: Aluminum alloy, Box: SGCC							
	Mounting	VESA, embedded							
	Dimensions (L * W * H, Unit: mm)	359*283*89.5	401.5*250.7*86.4	393*325.6*89.5	464.9*285.5*89.4	431*355.8*89.5	582.3*323.7*89.4	585.4*357.7*89.4	662.3*400.9*89.4
	Weight	Net: 7.4Kg Total: 8.9Kg	Net: 7.5Kg Total: 9.0Kg	Net: 8.4Kg Total: 9.9Kg	Net: 8.5Kg Total: 10.0Kg	Net: 9.3Kg Total: 10.8Kg	Net: 9.5Kg Total: 11.0Kg	Net: 11.1Kg Total: 12.6Kg	Net: 12.2Kg Total: 13.7Kg
Environment	Heat Dissipation System	Fanless Passive Cooling							
	Operating Temperature	0~50℃							
	Storage Temperature	-20~60℃							
	Relative Humidity	10 to 95% RH (non-condensing)							
	Vibration During Operation	With SSD: IEC 60068-2-64 (1Grms@5~500Hz, random, 1hr/axis)							
	Shock During Operation	With SSD: IEC 60068-2-27 (15G, half sine, 11ms)							

Product Dimensions



Product I/O

