



### Features:

- Resistive touchscreen design
- Modular design with 17/19" options available, supports both square and widescreen displays
- Front panel meets IP65 requirements
- Front panel integrates USB Type-A and signal indicator lights
- Supports Intel® 6th to 9th Gen Core / Pentium/ Celeron Desktop CPUs, TDP 35W
- Equipped with the Intel® Q170 chipset
- Two Intel Gigabit network interfaces and four DB9 serial ports
- Supports M.2 and 2.5-inch dual hard drive storage
- Four display outputs: VGA, DVI-D, DP++, and internal LVDS, supporting up to 4K@60Hz resolution
- 9~36V DC power supply (12V option available)
- Rack-mount/VESA mounting options



Remote Management



Status Monitoring



Remote Operations and Maintenance



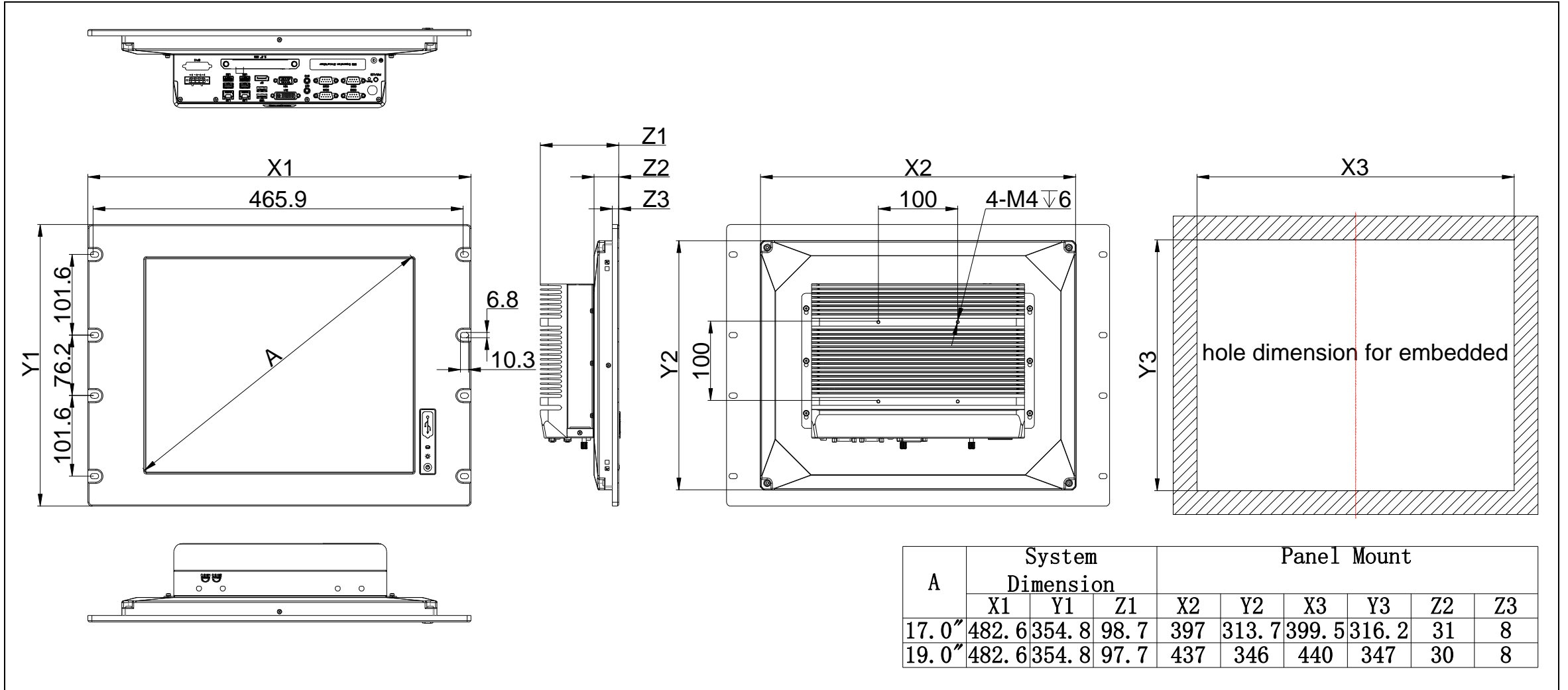
Security Control

## Product Specifications

Model	PG170RF-E7L	PG190RF-E7L	
<b>LCD</b>	Display Size	17.0"	19.0"
	Display Type	SXGA TFT-LCD	SXGA TFT-LCD
	Max. Resolution	1280 x 1024	1280 x 1024
	Luminance	250 cd/m <sup>2</sup>	250 cd/m <sup>2</sup>
	Aspect Ratio	5:4	5:4
	Viewing Angle	85/85/80/80°	89/89/89/89°
	Max. Color	16.7M	16.7M
	Backlight Lifetime	30,000 hr	30,000 hr
	Contrast Ratio	1000:1	1000:1
<b>Touchscreen</b>	Touch Type	5-Wire Resistive Touch	
	Controller	USB signal	
	Input	Finger/Touch pen	
	Light Transmission	≥78%	
	Hardness	≥3H	
	Click lifetime	100gf, 10 million times	
	Stroke lifetime	100gf, 1 million times	
Response time	≤15ms		
<b>Processor System</b>	CPU	Intel® 6/7/8/9th Generation Core / Pentium/ Celeron Desktop CPU	
	TDP	35W	
	Socket	LGA1151	
	Chipset	Q170	
	BIOS	AMI UEFI BIOS (Support Watchdog Timer)	
<b>Memory</b>	Socket	2 * Non-ECC SO-DIMM Slot, Dual Channel DDR4 up to 2133MHz	
	Max Capacity	64GB, Single Max. 32GB	
<b>Graphics</b>	Controller	Intel® HD Graphics	
<b>Ethernet</b>	Controller	1 * Intel i210-AT GbE LAN Chip (10/100/1000 Mbps) 1 * Intel i219-LM/V GbE LAN Chip (10/100/1000 Mbps)	
	Storage	1 * SATA3.0, Quick release 2.5" hard disk bays (T≤7mm) 1 * SATA3.0, Internal 2.5" hard disk bays (T≤9mm, Optional) Support RAID 0, 1	
<b>Expansion Slots</b>	MXM/aDoor	1 * APQ MXM (Optional MXM 4 * LAN/4 * POE/6 * COM/16 * GPIO expansion card) 1 * aDoor Expansion Slot	
	Mini PCIe	1 * Mini PCIe (PCIe x1 Gen 2 + USB 2.0, with 1 * SIM Card)	
<b>Front I/O</b>	Ethernet	2 * RJ45	
	USB	6 * USB3.0 (Type-A, 5Gbps)	
	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)	
<b>Rear I/O</b>	Antenna	4 * Antenna hole	
	SIM	2 * Nano SIM card slots	
<b>Internal I/O</b>	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)	
<b>Power Supply</b>	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	
<b>OS Support</b>	Windows	6/7th Core™: Windows 7/10/11 8/9th Core™: Windows 10/11	
	Linux	Linux	
<b>Watchdog</b>	Output	System Reset	
	Interval	Programmable via Software from 1 to 255 sec	
<b>Mechanical</b>	Enclosure Material	Radiator/Panel: Aluminum, Box/Cover: SGCC	
	Mounting	Rack-mount, VESA	
	Dimensions	482.6mm(L) * 354.8mm(W) * 98.7mm(H)	482.6mm(L) * 354.8mm(W) * 97.7mm(H)
	Weight	Net: 8.7kg, Total:11.7kg	Net: 9.kg, Total: 13.1kg
<b>Environment</b>	Heat Dissipation System	Passive heat dissipation	
	Operating Temperature	0~50°C	0~50°C
	Storage Temperature	-20~60°C	-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)	
	Shock During Operation	With SSD: IEC 60068-2-27 (15G, half sine, 11ms)	

## Product Dimensions



## Product I/O

