

# 9u rackmount panel pc lcd (3mm metal front bezel)



19" LCD Monitor, 1280x1024, 300nits, Front OSD. VESA Mounting & Built in Power Supply with 5 Wire Resistive Touch Screen and Integrated Intel \*MS-98E1 ( H110 SKU ) / i5-6500 / RAM 8GB ( 0C~70C ) / SSD 500GB + \*Win 10 IoT Ent 2019 LTSC MultiLang ESD OEI Entry

**Model: ERM1900PC-i5-TR-V1**

## FEATURES HIGHLIGHTS:

- Modularize mechanical design provides flexible product configuration and easy maintenance
- Optional build-in touch screen for interactive application
- 2 independent displays with multiple video outputs (LVDS, HDMI, DVI-D, VGA)
- Supports DirectX 11.1 and Intel Clear Video Technology (up to 1080P)
- 3 SATA 3.0 ports for faster and high-capacity storage
- Supports m-SATA function by Mini-PCIe slot
- Plenty USB ports for more peripherals(USB3.0\*4, USB2.0\*4, Vertical Type USB2.0\*1)

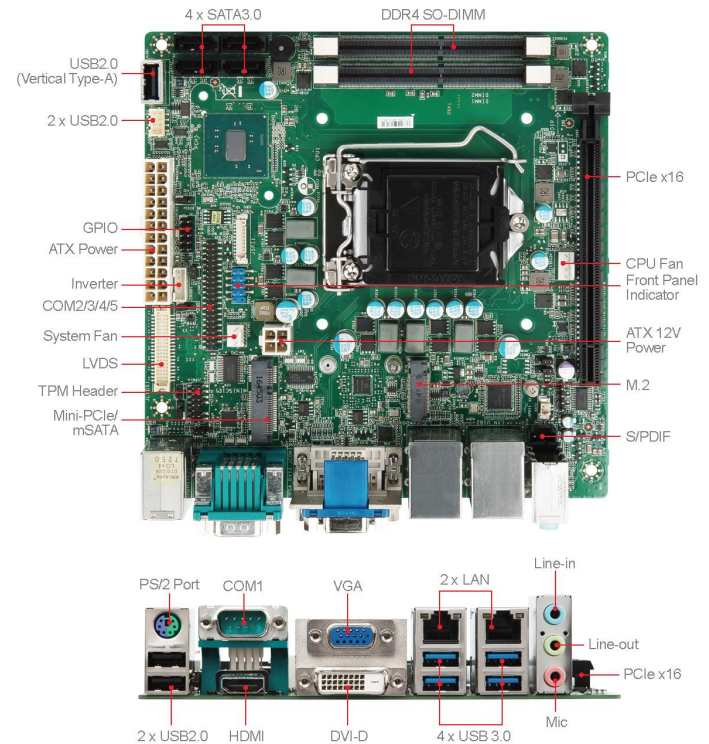
## SPECIFICATIONS:

<b>Panel</b>	Cell Type / Glass Surface	TFT LCD / Black Anti-Glare, low reflection coating
	Aspect Ratio / Size	4:3 / 19" viewable diagonal area
	Active Area / Pixel Pitch	376.3(H) x 301.1 (V) mm / 0.294(H) x 0.294(V) mm
	Native Resolution / Colors	1280(H) x 1024(V) / 16.7 Million
	Brightness / Contrast	300 cd/m2 (typ) / 800 : 1
	Response Time	^ 5 ms
	Viewing Angle (typical)	H. 160° (-80° ~ + 80° ) , V 160° (-80° ~ + 80° )
	Light Source	CCFL, Long life, 50,000 hrs (typ)
<b>Power</b>	Built in Power Supply	
<b>Environmental</b>	Operating Temperature	0 ~70°C
	Operating Humidity	Relative humidity 10% ~ 90% @40°C, Non-condensing

<b>Options</b>	Touch	Enhanced Panel	Others	
	Resistive (With glass)	High brightness panel	WiFi	Networking Digital Signage
	Capacitive	Panel-LED Backlight	Web Cam	Rechargeable battery
	SAW	Wide Temperature	Motion Sensor	
	Infrared	Wide Viewing Angel	Auto Light Sensor	
		Sunlight Readable	Auto-Dimming	

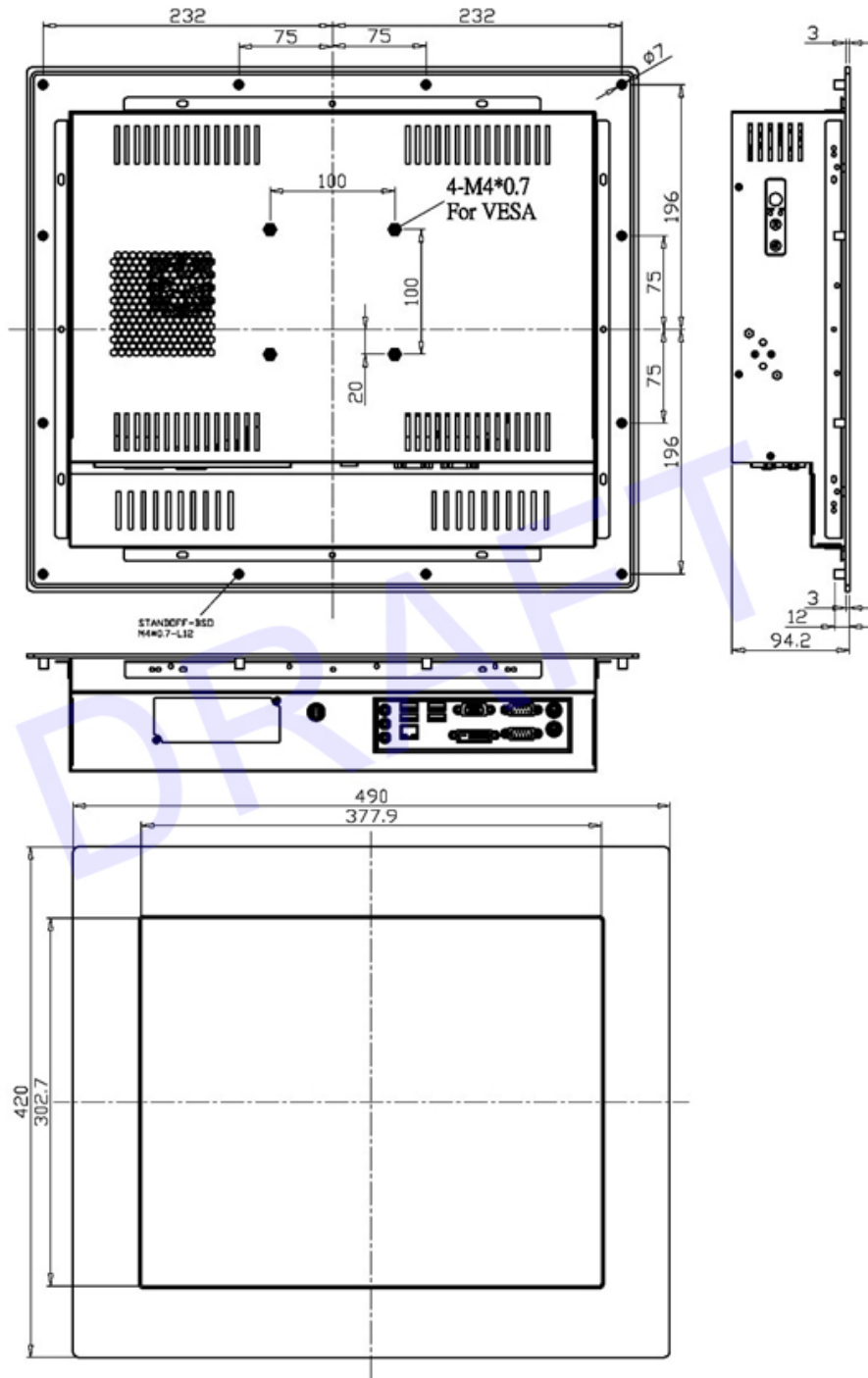
## MS-98E1 FEATURES

<b>Processor</b>	CPU	C236 SKU 7th/6th Gen Intel® Desktop Kaby Lake/Skylake Xeon/i7/i5/i3/Pentium®/Celeron Series Processor, Max 80W	H110 SKU 7th/6th Gen Intel® Desktop Kaby Lake/Skylake Core™ i7/i5/i3/Pentium®/Celeron® Series Processor, Max 65W
	Frequency	2.3GHz~4.0GHz (Depends on CPU)	
	L2 Cache	2M ~ 8M (Depends on CPU)	
	CPU Type	Socket (LGA 1151)	
	Chipset	Intel® C236 Express	Intel® H110 Express
	BIOS	AMI	
<b>Memory</b>	Technology	Dual-channel DDR4 (ECC) 2133MHz/2400MHz (7th Gen)	Dual-channel DDR4 (non-ECC) 2133MHz/2400MHz (7th Gen)
	Max. Capacity	Up to 32 GB	
	Socket	2 x 260-pin SO-DIMMs	
<b>Display</b>	Controller	Intel® HD Graphics	
	Graphic Memory	Shared system memory up to 1.7 GB SDRAM	
	LVDS	1	
	eDP	N/A	
	VGA	1	
	DVI	1 (DVI-D)	
	HDMI	1	
	Display Port	N/A	
	Multiple Display	3 independent displays	2 independent displays
	Display Interface	LVDS up to 1920 x 1200 HDMI up to 3840 x 2160 DVI-D up to 1920 x 1200 VGA up to 1920 x 1200	
<b>Ethernet</b>	Controller	1 x Intel® I219-LM GbE-PHY 1 x Intel® I211-AT PCIe GbE LAN (Co-lay I210-AT)	
<b>Audio</b>		Realtek® ALC887 HD Audio Codec	
<b>Super I/O</b>	Controller	Fintek F81866AD-I	
<b>H/W Monitor</b>	Watchdog Timer Smart Fan	256-level Watchdog Timer Yes	
<b>TPM</b>	Controller	Pin header	
<b>I/O Interface</b>	USB	4 x USB 3.0 (4 x rear) 4 x USB 2.0 (2 x rear; 2 x internal) 1 x USB 2.0 (Vertical, internal)	
	Serial	5 x COM (1 x rear; 4 x internal) COM1: RS-232/422/485, 0V/5V/12V COM2/3/4/5: RS-232, 0V/5V/12V	
	Parallel	N/A	
	PS/2	1	
	GPIO	8-bits (4 x GPI, 4 x GPO), 5V	
<b>Expansion Slot</b>	PCIe x 16	1	
	M.2	1 x M key (PCIe x4, SATA3.0, 2242)	N/A
	M.2 Mini-PCIe	1 x Full-size, mSATA	
<b>Storage</b>	SATA	4 x SATA 3.0	3 x SATA 3.0
	mSATA	1 (shared w/ Mini-PCIe)	
<b>Power Supply</b>	DC	N/A	
	ATX	ATX-Power 24P, 12V-4P	
<b>Environment</b>	Operating Temperature	0 ~ 70°C	
	Operating Humidity	10 ~ 90%, non-condensing	
	Storage Temperature	-20 ~ 80°C	
	Storage Humidity	10 ~ 90%, non-condensing	
<b>Form Factor</b>	Dimension	170mm x 170mm (Mini-ITX)	
	Weight	0.37 kg	
<b>Certification</b>	EMC	FCC, CE, RCM, VCCI, BSMI	
<b>Software Platform</b>	OS Support	Windows 7 (32/64-bit) Windows 8.1 (64-bit) Windows 10 (64-bit) Linux Kernel 4.X, support Fedora 23(64Bit) & Ubuntu 16.04 (64Bit) of Kaby Lake-S & Skylake-S	



- 3 independent displays with multiple video outputs (LVDS, HDMI, DVI-D, VGA)
  - Supports DirectX 11.1 and Intel® Clear Video Technology (up to 1080P)
  - 4 SATA 3.0 ports for RAID
  - Supports m-SATA function by Mini-PCIe slot
  - Plenty USB ports for more peripherals(USB3.0\*4, USB2.0\*4, Vertical Type USB2.0\*1)
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- 2 independent displays with multiple video outputs (LVDS, HDMI, DVI-D, VGA)
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**MECHANICAL DRAWING:**



**DRAWINGS FOR REFERENCE:** This is subject to change without Notice. Final Drawings will be provided for Approval after Order.