



FEATURES

- 12.1" LED backlight display (1024x768 resolution)
- Intel® Alder Lake-U processor
- Front panel IP65
- Surface coating for AG/AF
- 5G module with antenna
- RS232/RS422/RS485 setting by BIOS
- Remote power switch
- Strong expandability for RS232 or CAN&DIO or POE
- DC 12~36V wide voltage input, support RVP/SCP/OVP/OCV
- Modular design of the host and display for easy assembly and disassembly via socket connection

SPECIFICATIONS

System

CPU	Intel® Alder Lake-U processor
Memory	1 x SO-DIMM, DDR5 4800MHz, Max. 32GB
Storage	1 x M.2 M Key 2242/2280 (NVMe), 1 x 2.5" SATA3.0
Display	1 x HDMI 1.4b, 1 x DP 1.2 (only for non-clip cables)
USB	4 x USB3.2 Gen1 Type-A
COM	2 x RS232/RS422/RS485 (setting by BIOS)
LAN	3 x 10/100/1000/2500Mbps RJ-45 (Intel I226-V), 1 x 10/100/1000Mbps RJ-45 (Intel I210-AT)
Expansion	1 x M.2 E Key 2230 (for WiFi & Bluetooth), 1 x M.2 B Key 3042/3052 (for 4G/5G)
TPM	TPM 2.0
Watchdog	1~255 levels programmable

LCD

Display Type	12.1" XGA
Max. Resolution	1024x768
Luminance	500nits
Contrast Ration	1200:1
Viewing Angle	88 (L), 88 (R), 88 (U), 88 (D)
Backlight Lifetime	50000hrs

Touch Screen

Touch Type	Multi-touch projected capacitive
Light Transmission	≥ 81%

OS

OS Support	Windows10, Windows11, Linux
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Power

Input Voltage	DC 12~36V
Power Consumption	52.90W

Mechanical

Dimensions	298.5x237.5x79.0mm (11.8x9.4x3.1in)
Cutout Dimensions	286.5x225.5mm (11.3x8.9in)
Net Weight	4.15kg (9.15lb)

Environment

Operating Temperature	0~50°C (32~122°F)
Storage Temperature	-20~60°C (-4~140°F)
Relative Humidity	5%~95% @40°C (non-condensing)
IP Rating	Front panel IP65
Vibration	Operating random vibration test 5~500Hz, 1.5Grms @with SSD, follows IEC 60068-2-64
Shock	Operating 15G peak acceleration (11ms duration), follows IEC 60068-2-27
EMC	CE/FCC Class A

OPTIONS

System

CPU	i3-1215U, 6 cores, base frequency 1.2GHz, TDP 15W i5-1235U, 10 cores, base frequency 1.3GHz, TDP 15W i7-1255U, 10 cores, base frequency 1.7GHz, TDP 15W
Memory	DDR5 memory, support 8GB, 16GB, 32GB
Storage	M.2 SSD, support 128GB, 256GB, 512GB, 1TB, 2TB 2.5" SATA3.0, support 128GB, 256GB, 512GB, 1TB, 2TB

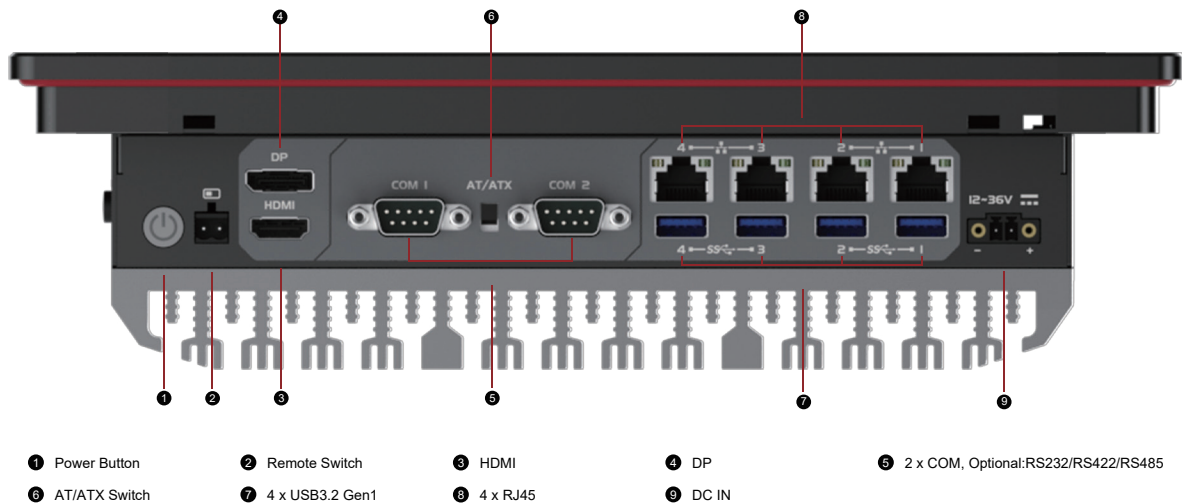
Communications

4G/5G	4G/5G module with antenna
WiFi & Bluetooth	WiFi & Bluetooth module with antenna

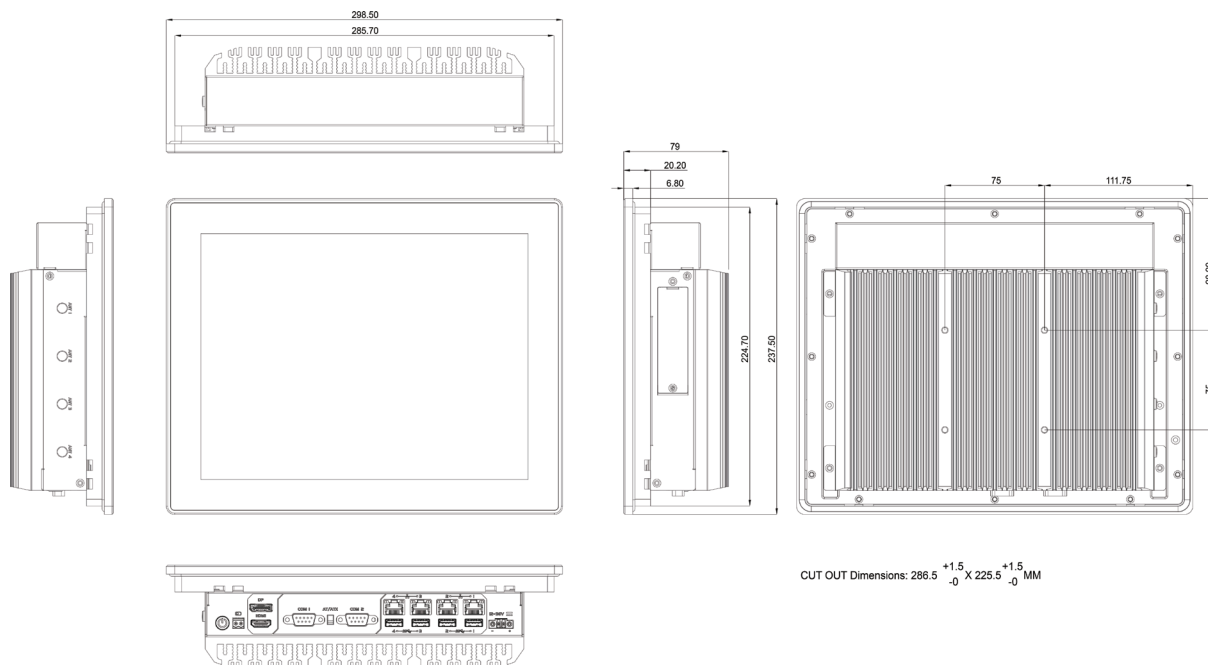
Expansion

Expansion Card 1	2 x Iso.RS232 COM, DB9 connector 2 x CAN, 4 x Iso.DI, 4 x Iso.DO
Expansion Card 2	4 x POE+, support 802.3at

I/O LAYOUT



PRODUCT DIMENSIONS





FEATURES

- 15.0" LED backlight display (1024x768 resolution)
- Intel® Alder Lake-U processor
- Front panel IP65
- Surface coating for AG/AF
- 5G module with antenna
- RS232/RS422/RS485 setting by BIOS
- Remote power switch
- Strong expandability for RS232 or CAN&DIO or POE
- DC 12~36V wide voltage input, support RVP/SCP/OVP/OCV
- Modular design of the host and display for easy assembly and disassembly via socket connection

SPECIFICATIONS

System

CPU	Intel® Alder Lake-U processor
Memory	1 x SO-DIMM, DDR5 4800MHz, Max. 32GB
Storage	1 x M.2 M Key 2242/2280 (NVMe), 1 x 2.5" SATA3.0
Display	1 x HDMI 1.4b, 1 x DP 1.2 (only for non-clip cables)
USB	4 x USB3.2 Gen1 Type-A
COM	2 x RS232/RS422/RS485 (setting by BIOS)
LAN	3 x 10/100/1000/2500Mbps RJ-45 (Intel I226-V), 1 x 10/100/1000Mbps RJ-45 (Intel I210-AT)
Expansion	1 x M.2 E Key 2230 (for WiFi & Bluetooth), 1 x M.2 B Key 3042/3052 (for 4G/5G)
TPM	TPM 2.0
Watchdog	1~255 levels programmable

LCD

Display Type	15.0" XGA
Max. Resolution	1024x768
Luminance	350nits
Contrast Ration	1000:1
Viewing Angle	89 (L), 89 (R), 89 (U), 89 (D)
Backlight Lifetime	50000hrs

Touch Screen

Touch Type	Multi-touch projected capacitive
Light Transmission	≥ 81%

OS

OS Support	Windows10, Windows11, Linux
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Power

Input Voltage	DC 12~36V
Power Consumption	50.80W

Mechanical

Dimensions	360.0x284.0x79.0mm (11.8x9.4x3.1in)
Cutout Dimensions	348.0x272.0mm (13.7x10.7in)
Net Weight	5.40kg (11.90lb)

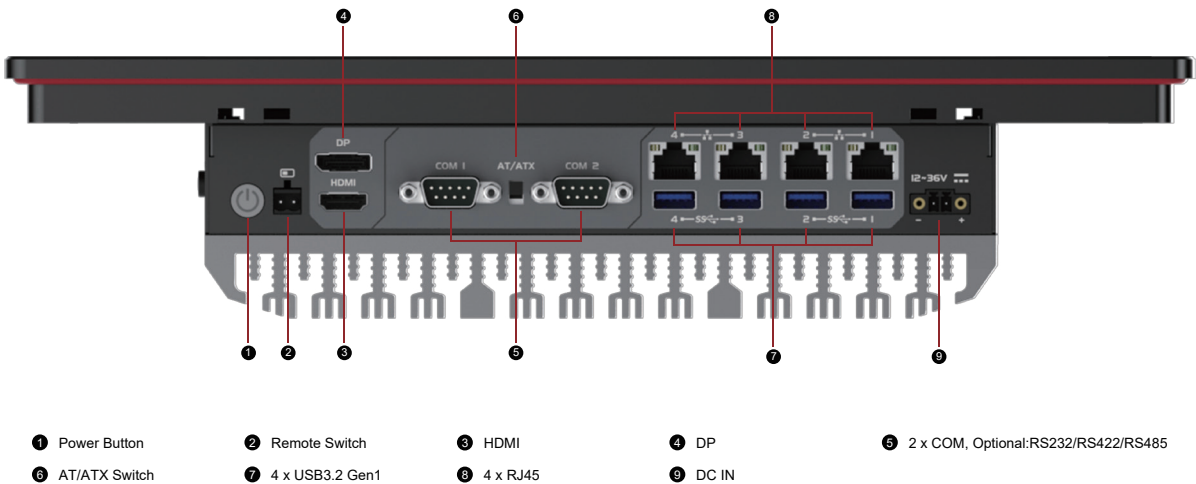
Environment

Operating Temperature	0~50°C (32~122°F)
Storage Temperature	-20~60°C (-4~140°F)
Relative Humidity	5%~95% @40°C (non-condensing)
IP Rating	Front panel IP65
Vibration	Operating random vibration test 5~500Hz, 1.5Grms @with SSD, follows IEC 60068-2-64
Shock	Operating 15G peak acceleration (11ms duration), follows IEC 60068-2-27
EMC	CE/FCC Class A

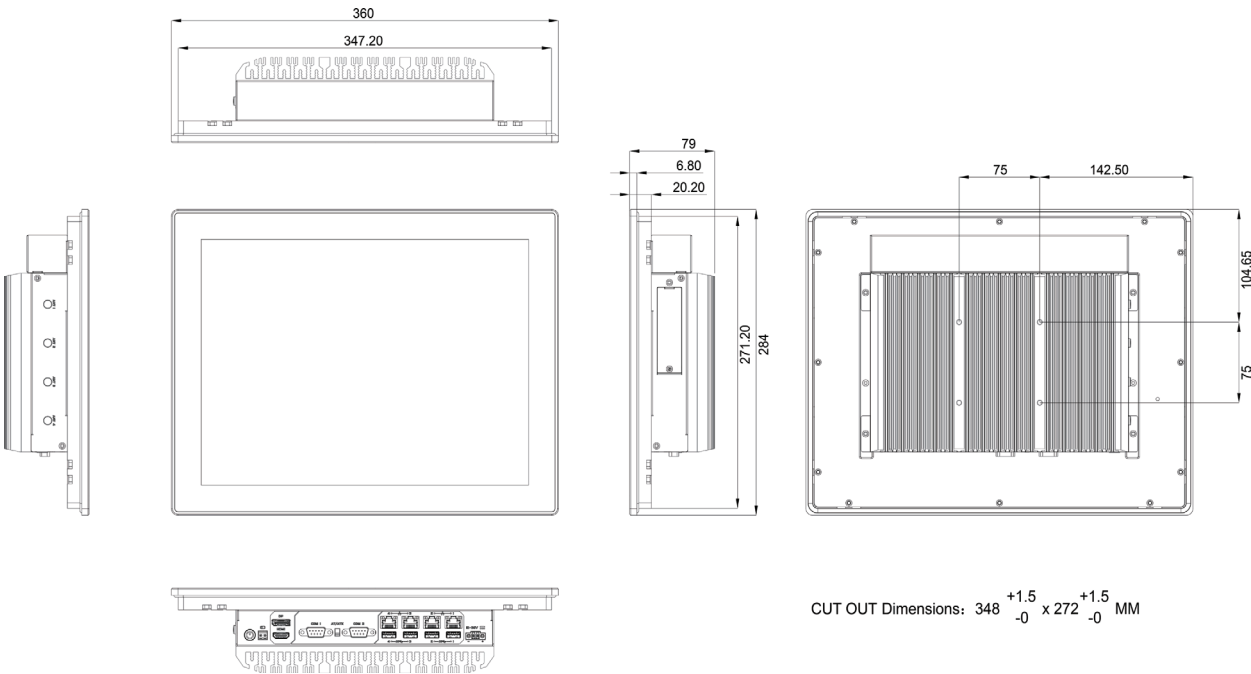
OPTIONS

System		Expansion	
CPU	i3-1215U, 6 cores, base frequency 1.2GHz, TDP 15W i5-1235U, 10 cores, base frequency 1.3GHz, TDP 15W i7-1255U, 10 cores, base frequency 1.7GHz, TDP 15W	Expansion Card 1	2 x Iso.RS232 COM, DB9 connector 2 x CAN, 4 x Iso.DI, 4 x Iso.DO
Memory	DDR5 memory, support 8GB, 16GB, 32GB	Expansion Card 2	4 x POE+, support 802.3at
Storage	M.2 SSD, support 128GB, 256GB, 512GB, 1TB, 2TB 2.5" SATA3.0, support 128GB, 256GB, 512GB, 1TB, 2TB		
Communications			
4G/5G	4G/5G module with antenna		
WiFi & Bluetooth	WiFi & Bluetooth module with antenna		

I/O LAYOUT



PRODUCT DIMENSIONS





FEATURES

- 15.6" LED backlight display (1920x1080 resolution)
- Intel® Alder Lake-U processor
- Front panel IP65
- Surface coating for AG/AF
- 5G module with antenna
- RS232/RS422/RS485 setting by BIOS
- Remote power switch
- Strong expandability for RS232 or CAN&DIO or POE
- DC 12~36V wide voltage input, support RVP/SCP/OVP/OCV
- Modular design of the host and display for easy assembly and disassembly via socket connection

SPECIFICATIONS

System

CPU	Intel® Alder Lake-U processor
Memory	1 x SO-DIMM, DDR5 4800MHz, Max. 32GB
Storage	1 x M.2 M Key 2242/2280 (NVMe), 1 x 2.5" SATA3.0
Display	1 x HDMI 1.4b, 1 x DP 1.2 (only for non-clip cables)
USB	4 x USB3.2 Gen1 Type-A
COM	2 x RS232/RS422/RS485 (setting by BIOS)
LAN	3 x 10/100/1000/2500Mbps RJ-45 (Intel I226-V), 1 x 10/100/1000Mbps RJ-45 (Intel I210-AT)
Expansion	1 x M.2 E Key 2230 (for WiFi & Bluetooth), 1 x M.2 B Key 3042/3052 (for 4G/5G)
TPM	TPM 2.0
Watchdog	1~255 levels programmable

LCD

Display Type	15.6" FHD
Max. Resolution	1920x1080
Luminance	300nits
Contrast Ration	800:1
Viewing Angle	85 (L), 85 (R), 85 (U), 85 (D)
Backlight Lifetime	15000hrs

Touch Screen

Touch Type	Multi-touch projected capacitive
Light Transmission	≥ 81%

OS

OS Support	Windows10, Windows11, Linux
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Power

Input Voltage	DC 12~36V
Power Consumption	44.20W

Mechanical

Dimensions	398.4x250.8x79.0mm (15.7x9.9x3.1in)
Cutout Dimensions	386.5x239.0mm (15.2x9.4in)
Net Weight	4.78kg (10.54lb)

Environment

Operating Temperature	0~50°C (32~122°F)
Storage Temperature	-20~60°C (-4~140°F)
Relative Humidity	5%~95% @40°C (non-condensing)
IP Rating	Front panel IP65
Vibration	Operating random vibration test 5~500Hz, 1.5Grms @with SSD, follows IEC 60068-2-64
Shock	Operating 15G peak acceleration (11ms duration), follows IEC 60068-2-27
EMC	CE/FCC Class A

OPTIONS

System

CPU	i3-1215U, 6 cores, base frequency 1.2GHz, TDP 15W i5-1235U, 10 cores, base frequency 1.3GHz, TDP 15W i7-1255U, 10 cores, base frequency 1.7GHz, TDP 15W
Memory	DDR5 memory, support 8GB, 16GB, 32GB
Storage	M.2 SSD, support 128GB, 256GB, 512GB, 1TB, 2TB 2.5" SATA3.0, support 128GB, 256GB, 512GB, 1TB, 2TB

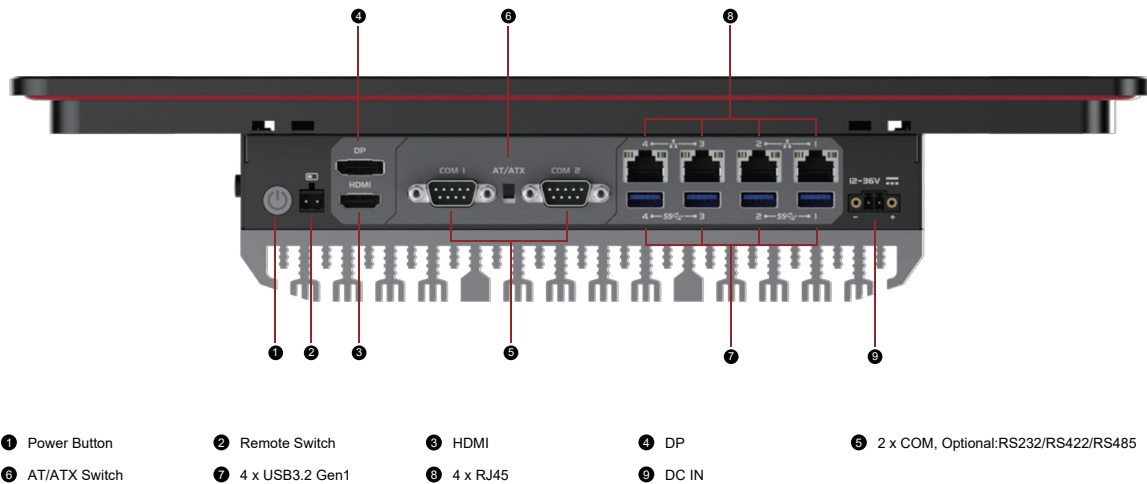
Communications

4G/5G	4G/5G module with antenna
WiFi & Bluetooth	WiFi & Bluetooth module with antenna

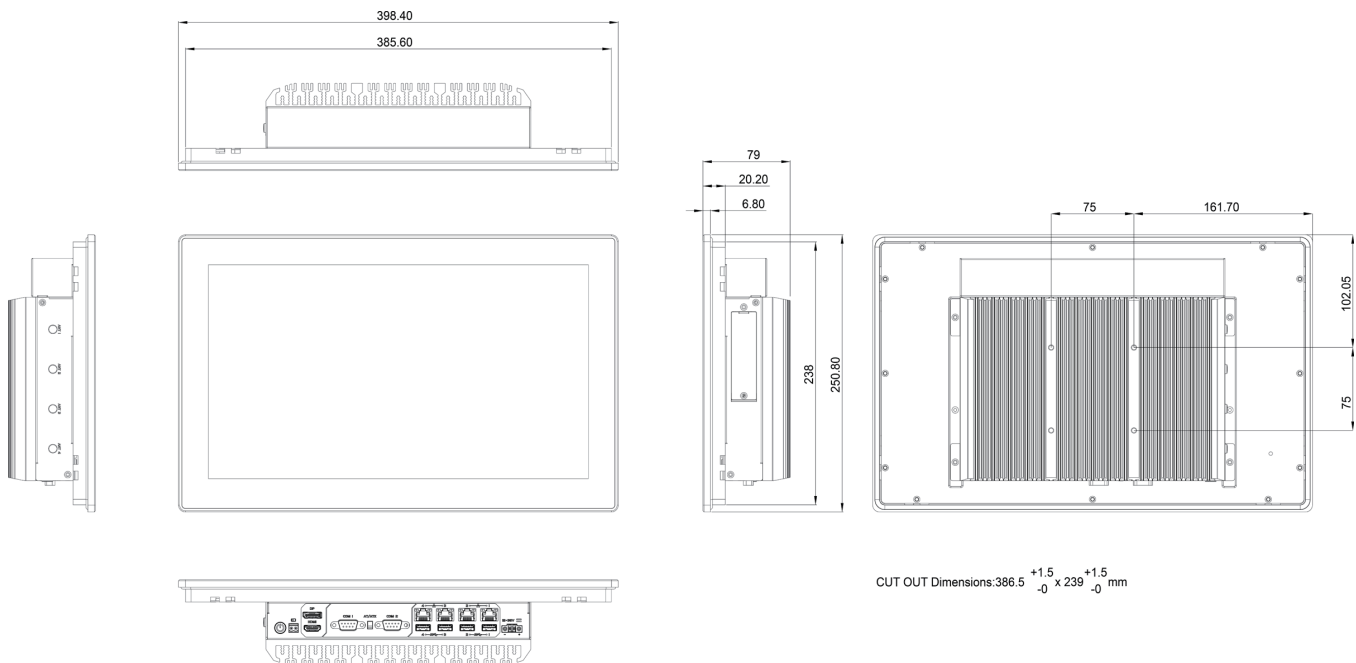
Expansion

Expansion Card 1	2 x Iso.RS232 COM, DB9 connector 2 x CAN, 4 x Iso.DI, 4 x Iso.DO
Expansion Card 2	4 x POE+, support 802.3at

I/O LAYOUT



PRODUCT DIMENSIONS





FEATURES

- 17.0" LED backlight display (1280x1024 resolution)
- Intel® Alder Lake-U processor
- Front panel IP65
- Surface coating for AG/AF
- 5G module with antenna
- RS232/RS422/RS485 setting by BIOS
- Remote power switch
- Strong expandability for RS232 or CAN&DIO or POE
- DC 12~36V wide voltage input, support RVP/SCP/OVP/OCV
- Modular design of the host and display for easy assembly and disassembly via socket connection

SPECIFICATIONS

System

CPU	Intel® Alder Lake-U processor
Memory	1 x SO-DIMM, DDR5 4800MHz, Max. 32GB
Storage	1 x M.2 M Key 2242/2280 (NVMe), 1 x 2.5" SATA3.0
Display	1 x HDMI 1.4b, 1 x DP 1.2 (only for non-clip cables)
USB	4 x USB3.2 Gen1 Type-A
COM	2 x RS232/RS422/RS485 (setting by BIOS)
LAN	3 x 10/100/1000/2500Mbps RJ-45 (Intel I226-V), 1 x 10/100/1000Mbps RJ-45 (Intel I210-AT)
Expansion	1 x M.2 E Key 2230 (for WiFi & Bluetooth), 1 x M.2 B Key 3042/3052 (for 4G/5G)
TPM	TPM 2.0
Watchdog	1~255 levels programmable

LCD

Display Type	17.0" SXGA
Max. Resolution	1280x1024
Luminance	250nits
Contrast Ration	1000:1
Viewing Angle	85 (L), 85 (R), 80 (U), 80 (D)
Backlight Lifetime	50000hrs

Touch Screen

Touch Type	Multi-touch projected capacitive
Light Transmission	≥ 81%

OS

OS Support	Windows10, Windows11, Linux
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Power

Input Voltage	DC 12~36V
Power Consumption	47.50W

Mechanical

Dimensions	391.4x326.4x79.0mm (15.4x12.9x3.1in)
Cutout Dimensions	379.5x314.5mm (14.9x12.4in)
Net Weight	5.77kg (12.72lb)

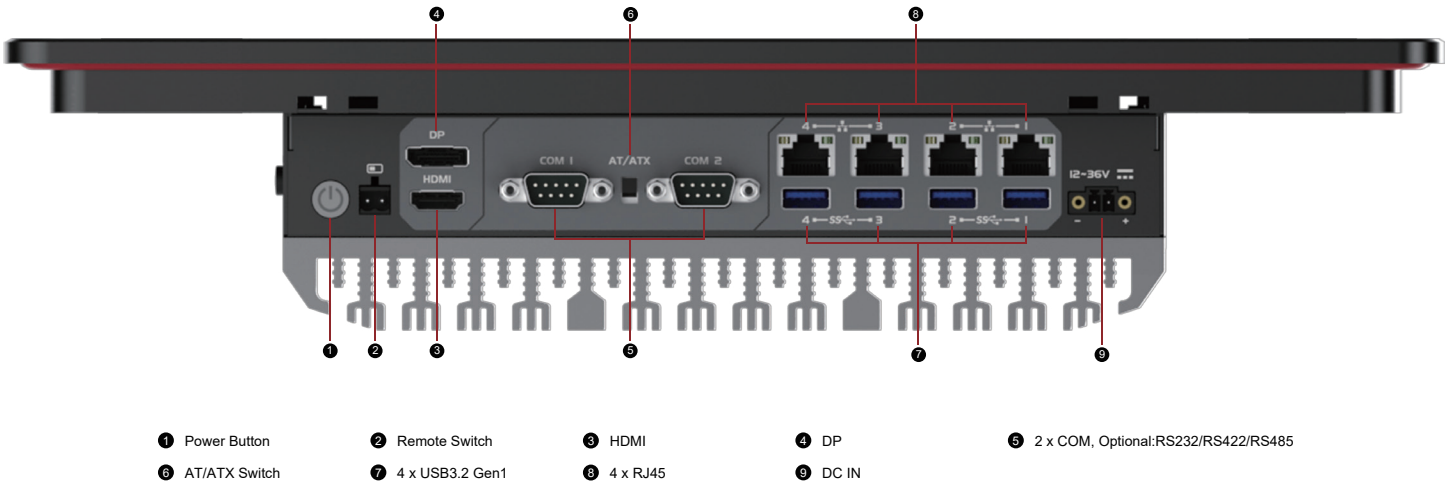
Environment

Operating Temperature	0~50°C (32~122°F)
Storage Temperature	-20~60°C (-4~140°F)
Relative Humidity	5%~95% @40°C (non-condensing)
IP Rating	Front panel IP65
Vibration	Operating random vibration test 5~500Hz, 1.5Grms @with SSD, follows IEC 60068-2-64
Shock	Operating 15G peak acceleration (11ms duration), follows IEC 60068-2-27
EMC	CE/FCC Class A

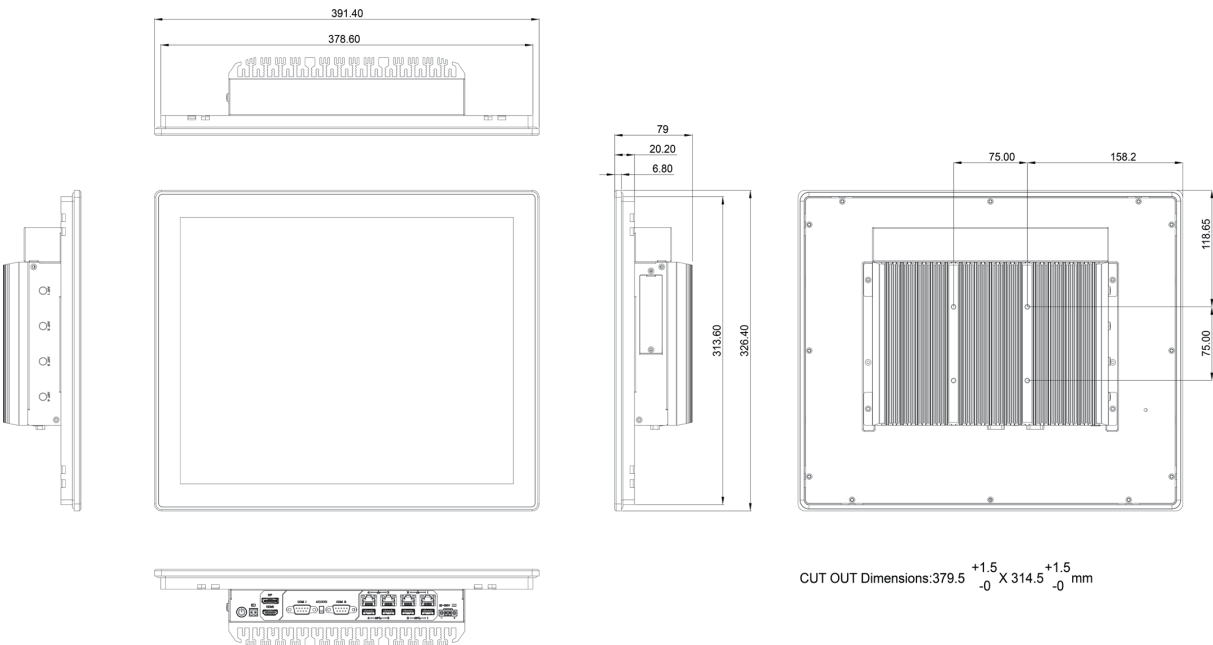
OPTIONS

System		Expansion	
CPU	i3-1215U, 6 cores, base frequency 1.2GHz, TDP 15W i5-1235U, 10 cores, base frequency 1.3GHz, TDP 15W i7-1255U, 10 cores, base frequency 1.7GHz, TDP 15W	Expansion Card 1	2 x Iso.RS232 COM, DB9 connector 2 x CAN, 4 x Iso.DI, 4 x Iso.DO
Memory	DDR5 memory, support 8GB, 16GB, 32GB	Expansion Card 2	4 x POE+, support 802.3at
Storage	M.2 SSD, support 128GB, 256GB, 512GB, 1TB, 2TB 2.5" SATA3.0, support 128GB, 256GB, 512GB, 1TB, 2TB		
Communications			
4G/5G	4G/5G module with antenna		
WiFi & Bluetooth	WiFi & Bluetooth module with antenna		

I/O LAYOUT



PRODUCT DIMENSIONS





FEATURES

- 18.5" LED backlight display (1920x1080 resolution)
- Intel® Alder Lake-U processor
- Front panel IP65
- Surface coating for AG/AF
- 5G module with antenna
- RS232/RS422/RS485 setting by BIOS
- Remote power switch
- Strong expandability for RS232 or CAN&DIO or POE
- DC 12~36V wide voltage input, support RVP/SCP/OVP/OCV
- Modular design of the host and display for easy assembly and disassembly via socket connection

SPECIFICATIONS

System

CPU	Intel® Alder Lake-U processor
Memory	1 x SO-DIMM, DDR5 4800MHz, Max. 32GB
Storage	1 x M.2 M Key 2242/2280 (NVMe), 1 x 2.5" SATA3.0
Display	1 x HDMI 1.4b, 1 x DP 1.2 (only for non-clip cables)
USB	4 x USB3.2 Gen1 Type-A
COM	2 x RS232/RS422/RS485 (setting by BIOS)
LAN	3 x 10/100/1000/2500Mbps RJ-45 (Intel I226-V), 1 x 10/100/1000Mbps RJ-45 (Intel I210-AT)
Expansion	1 x M.2 E Key 2230 (for WiFi & Bluetooth), 1 x M.2 B Key 3042/3052 (for 4G/5G)
TPM	TPM 2.0
Watchdog	1~255 levels programmable

LCD

Display Type	18.5" FHD
Max. Resolution	1920x1080
Luminance	250nits
Contrast Ration	1000:1
Viewing Angle	89 (L), 89 (R), 89 (U), 89 (D)
Backlight Lifetime	50000hrs

Touch Screen

Touch Type	Multi-touch projected capacitive
Light Transmission	≥ 81%

OS

OS Support	Windows10, Windows11, Linux
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Power

Input Voltage	DC 12~36V
Power Consumption	50.33W

Mechanical

Dimensions	470.0x290.0x79.0mm (18.5x11.4x3.1in)
Cutout Dimensions	458.0x278.0mm (18.0x10.9in)
Net Weight	6.06kg (13.36lb)

Environment

Operating Temperature	0~50°C (32~122°F)
Storage Temperature	-20~60°C (-4~140°F)
Relative Humidity	5%~95% @40°C (non-condensing)
IP Rating	Front panel IP65
Vibration	Operating random vibration test 5~500Hz, 1.5Grms @with SSD, follows IEC 60068-2-64
Shock	Operating 15G peak acceleration (11ms duration), follows IEC 60068-2-27
EMC	CE/FCC Class A

OPTIONS

System

CPU	i3-1215U, 6 cores, base frequency 1.2GHz, TDP 15W i5-1235U, 10 cores, base frequency 1.3GHz, TDP 15W i7-1255U, 10 cores, base frequency 1.7GHz, TDP 15W
Memory	DDR5 memory, support 8GB, 16GB, 32GB
Storage	M.2 SSD, support 128GB, 256GB, 512GB, 1TB, 2TB 2.5" SATA3.0, support 128GB, 256GB, 512GB, 1TB, 2TB

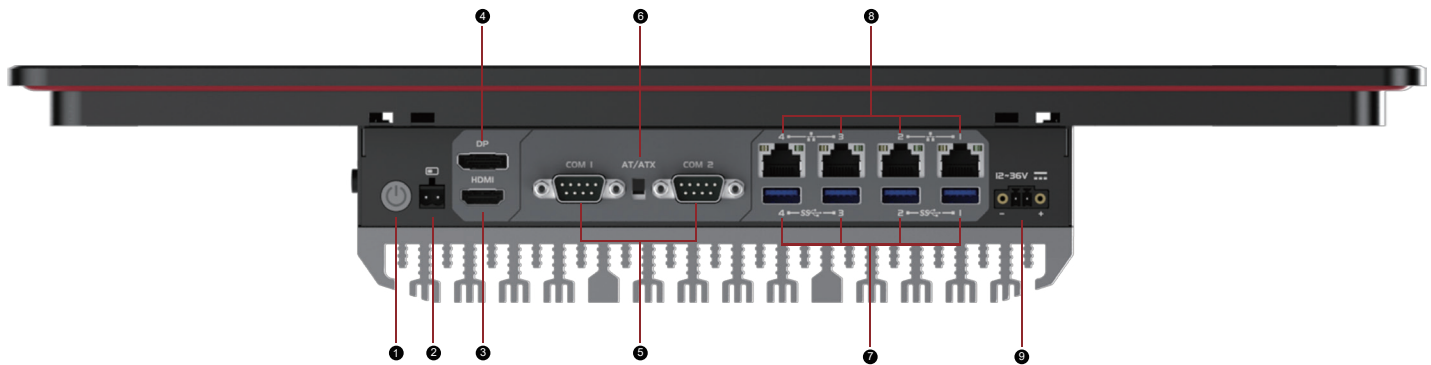
Communications

4G/5G	4G/5G module with antenna
WiFi & Bluetooth	WiFi & Bluetooth module with antenna

Expansion

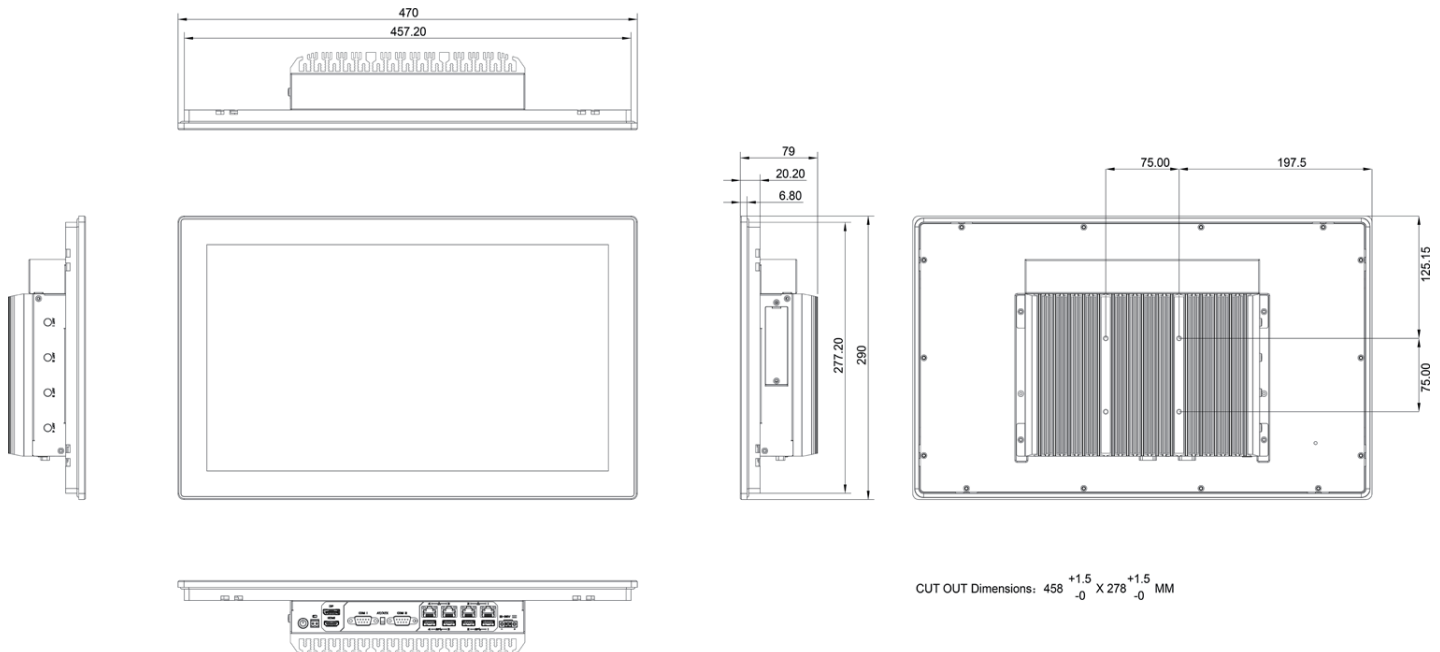
Expansion Card 1	2 x Iso.RS232 COM, DB9 connector 2 x CAN, 4 x Iso.DI, 4 x Iso.DO
Expansion Card 2	4 x POE+, support 802.3at

I/O LAYOUT



- ❶ Power Button
- ❷ Remote Switch
- ❸ HDMI
- ❹ DP
- ❺ 2 x COM, Optional: RS232/RS422/RS485
- ❻ AT/ATX Switch
- ❼ 4 x USB3.2 Gen1
- ❽ 4 x RJ45
- ❾ DC IN

PRODUCT DIMENSIONS



CUT OUT Dimensions: 458^{+1.5}₋₀ X 278^{+1.5}₋₀ MM



FEATURES

- 21.5" LED backlight display (1920x1080 resolution)
- Intel® Alder Lake-U processor
- Front panel IP65
- Surface coating for AG/AF
- 5G module with antenna
- RS232/RS422/RS485 setting by BIOS
- Remote power switch
- Strong expandability for RS232 or CAN&DIO or POE
- DC 12~36V wide voltage input, support RVP/SCP/OVP/OC
- Modular design of the host and display for easy assembly and disassembly via socket connection

SPECIFICATIONS

System

CPU	Intel® Alder Lake-U processor
Memory	1 x SO-DIMM, DDR5 4800MHz, Max. 32GB
Storage	1 x M.2 M Key 2242/2280 (NVMe), 1 x 2.5" SATA3.0
Display	1 x HDMI 1.4b, 1 x DP 1.2 (only for non-clip cables)
USB	4 x USB3.2 Gen1 Type-A
COM	2 x RS232/RS422/RS485 (setting by BIOS)
LAN	3 x 10/100/1000/2500Mbps RJ-45 (Intel I226-V), 1 x 10/100/1000Mbps RJ-45 (Intel I210-AT)
Expansion	1 x M.2 E Key 2230 (for WiFi & Bluetooth), 1 x M.2 B Key 3042/3052 (for 4G/5G)
TPM	TPM 2.0
Watchdog	1~255 levels programmable

LCD

Display Type	21.5" FHD
Max. Resolution	1920x1080
Luminance	250nits
Contrast Ration	1000:1
Viewing Angle	89 (L), 89 (R), 89 (U), 89 (D)
Backlight Lifetime	50000hrs

Touch Screen

Touch Type	Multi-touch projected capacitive
Light Transmission	≥ 81%

OS

OS Support	Windows10, Windows11, Linux
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Power

Input Voltage	DC 12~36V
Power Consumption	56.98W

Mechanical

Dimensions	532.5x324.0x79.0mm (21.0x12.8x3.1in)
Cutout Dimensions	520.5x312.0mm (20.5x12.3in)
Net Weight	7.57kg (16.69lb)

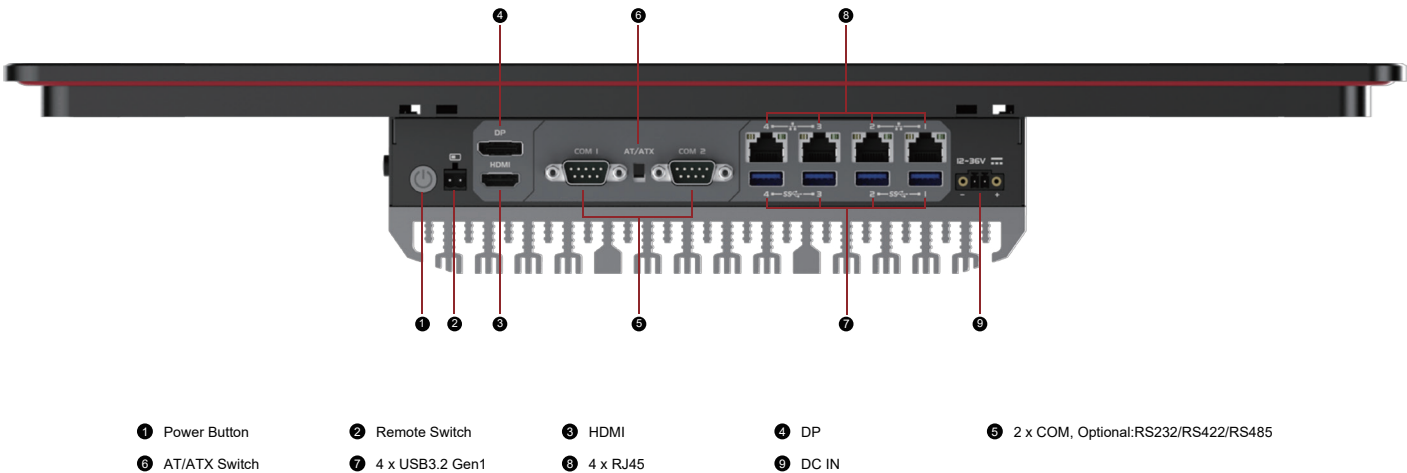
Environment

Operating Temperature	0~50°C (32~122°F)
Storage Temperature	-20~60°C (-4~140°F)
Relative Humidity	5%~95% @40°C (non-condensing)
IP Rating	Front panel IP65
Vibration	Operating random vibration test 5~500Hz, 1.5Grms @with SSD, follows IEC 60068-2-64
Shock	Operating 15G peak acceleration (11ms duration), follows IEC 60068-2-27
EMC	CE/FCC Class A

OPTIONS

System		Expansion	
CPU	i3-1215U, 6 cores, base frequency 1.2GHz, TDP 15W i5-1235U, 10 cores, base frequency 1.3GHz, TDP 15W i7-1255U, 10 cores, base frequency 1.7GHz, TDP 15W	Expansion Card 1	2 x Iso.RS232 COM, DB9 connector 2 x CAN, 4 x Iso.DI, 4 x Iso.DO
Memory	DDR5 memory, support 8GB, 16GB, 32GB	Expansion Card 2	4 x POE+, support 802.3at
Storage	M.2 SSD, support 128GB, 256GB, 512GB, 1TB, 2TB 2.5" SATA3.0, support 128GB, 256GB, 512GB, 1TB, 2TB		
Communications			
4G/5G	4G/5G module with antenna		
WiFi & Bluetooth	WiFi & Bluetooth module with antenna		

I/O LAYOUT



PRODUCT DIMENSIONS

