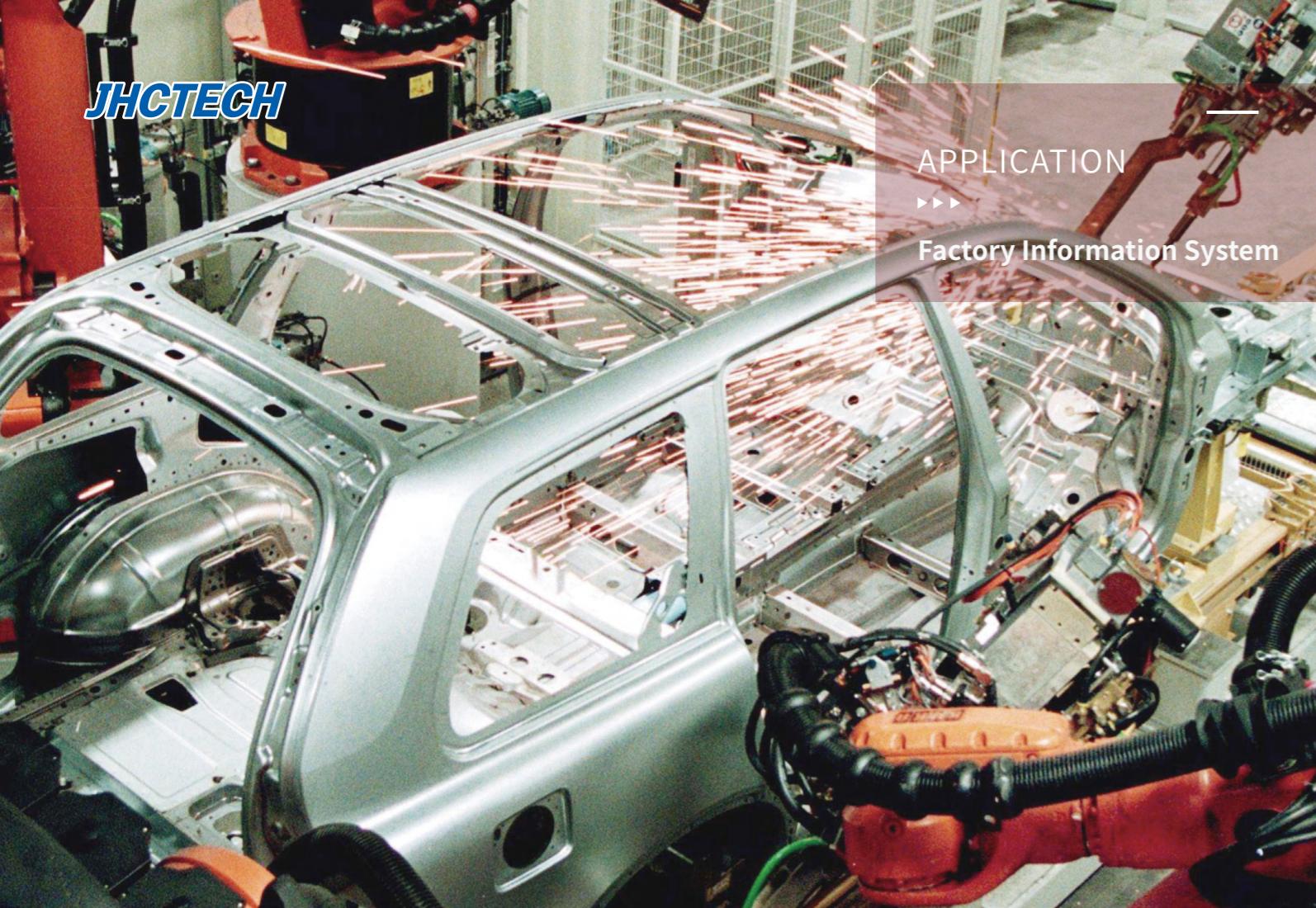


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**ALAD**  
Industrial Panel PC



### New product and differences for ALAD tablets

Model	CPU	Model	CPU	Model	CPU
A1010T/T(P)	Elkhart lake	K1020T	Sky lake-U/ Kaby lake-U	K1050T/T(P)	Tiger lake-U
A1210T/T(P)		K1220T		K1250T/T(P)	
A1510T(P)		K1520T		K1550T(P)	
A1710T/T(P)		K1720T		K1750T/T(P)	
A1810T(P)		K1820T(P)		K1850T(P)	
A1910T/T(P)		K1920T		K1950T/T(P)	
A2110T(P)		K2120T(P)		K2150T(P)	
A2310T(P)		K2320T(P)		K2350T(P)	



### COMPLETE LIST

Industrial Panel PC List **D-01**

ALAD-K1050T(P) **D-05**

ALAD-K1250T(P) **D-07**

ALAD-K1550T(P) **D-09**

ALAD-K1551T(P) **D-11**

ALAD-K1750T(P) **D-13**

ALAD-K1850T(P) **D-15**

ALAD-K1950T(P) **D-17**

ALAD-K2150T(P) **D-19**

ALAD-K2350T(P) **D-21**

WPPC-H1580T **D-23**

WPPC-H1780T **D-25**

Display List **D-27**

ALAD-101T **D-29**

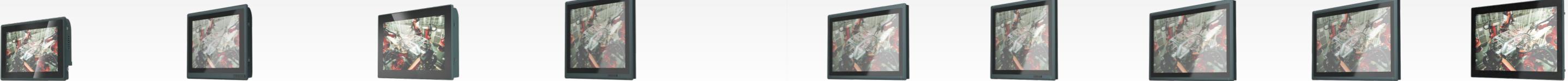
ALAD-151T **D-31**

ALAD-171T **D-33**

ALAD-181T(P) **D-35**

ALAD-191T **D-37**

ALAD-211T(P) **D-39**





	<b>WPPC-H1580T</b>	<b>WPPC-H1780T</b>
<b>System</b>		
CPU	Intel® Baytrail Celeron J1900 2.0-2.42G CPU	Intel® Baytrail Celeron J1900 2.0-2.42G CPU
RAM	1*DDR3L,1333Mhz SODIMM,Max.8GB Gen.7 Intel® HD Graphics LCD+HDMI+VGA display,OpenGL 3.2, Graphics DirectX 11, OpenCL 1.2, MPGE2/H.264 VGA:1920*1200@60Hz; HDMI:1920*1080@60Hz	1*DDR3L,1333Mhz SODIMM, Max.8GB Gen.7 Intel® HD Graphics LCD+HDMI+VGA display,OpenGL 3.2, DirectX 11, OpenCL 1.2, MPGE2/H.264 VGA:1920*1200@60Hz; HDMI:1920*1080@60Hz
<b>I/O Interfaces</b>		
LAN	2*Intel I211AT, Gigabit	2*Intel I211AT, Gigabit
USB	1*USB3.0,3*USB2.0	1*USB3.0,3*USB2.0
Display	1*HDMI+1*VGA	1*HDMI+1*VGA
Audio	Optional audio	Optional audio
Serial port	2*RS232/422/485	2*RS232/422/485
<b>LCD Display</b>		
Dimensions	15" TFT LED	17" TFT LED
Resolution	1024*768	1280*1024
Max. colors	16.2M	16.2M
Luminance(cd/m²)	350	600
Viewing Angle	80°(left), 80°(right), 80°(up), 80°(down)	80°(left), 80°(right), 70°(up), 80°(down)
<b>Touch screen</b>		
Touch type	5-wire resistive touch screen/ projected capacitive touch screen	5-wire resistive touch screen/ projected capacitive touch screen
Light Transmission	83/90%	83/90%
Controller	USB	USB
<b>Storage</b>		
Storage	1*2.5" SATA swappable, 1*mSATA, support AHCI	1*2.5" SATA swappable, 1*mSATA Full-height card, support AHCI
<b>Expansion</b>		
Expansion Port	1*Mini PCIe, with SIM slot	1*Mini PCIe, with SIM slot
<b>Power Supply</b>		
Input voltage & Power consumption	DC IN 9~36V, D-Jack w/M8, Power consumption: 19.5W	DC IN 9~36V, D-Jack w/M8, Power consumption: 30W
<b>Mechanical</b>		
Structure	SUS304 stainless steel/5052 Aluminum alloy/SECC	SUS304 stainless steel/5052 Aluminum alloy/SECC
Dimension (W*H*D)	405.22*328.22*52.1mm	429.51*364.51*52.1mm
Installation	Desktop mounting VESA(100mm*100mm)	Desktop mounting VESA(100mm*100mm)
Net Weight	5.8KG	5.57KG
<b>Environmental</b>		
Operating Temperature	0~ 60°C	0~ 60°C
Storage Temperature	-40°C~85°C	-40°C~85°C
Storage Humidity	10~90%@40°C, No-condensation	10~90%@40°C, No-condensation
Vibration	1g 5~500Hz	1g 5~500Hz
Shock	10g peak acceleration (duration 11ms) with HDD	10g peak acceleration (duration 11ms) with HDD
EMC	CE,FCC Class A	CE,FCC Class A
<b>OS</b>	Windows 7,Windows 8.1, Windows 10,Linux Fedora Ubuntu	Windows 7,Windows 8.1, Windows 10,Linux Fedora Ubuntu

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# ALAD-K1050T(P)

10.1" TFT LCD Capacitive/Resistive Touch, Intel® Tigerlake CPU, 2\*COM, 2\*LAN, 4\*USB3.2, 1\* Line out, 1\*2.5"SATA, 1\*mSATA, DC 9~36V

## Key Specification

- Aluminum die-casting chassis
- 10.1" TFT LCD, Multi-point capacitive/5 wire resistive touch
- Intel® Tigerlake CPU, fanless design
- 1\*DDR4 3200 SODIMM, up to 32GB
- 1\*Mini PCIe, 1\*M.2 B-Key Type 3042/3052
- 2\*COM, 2\*LAN, 4\*USB3.2, 1\*8-bit DIO (Optional with COM1/2)
- 2.5"SATA Bay, 1\*mSATA, 1\*Line out, 2\*2W Speaker
- DC 9~36V power input
- Standard VESA mount and panel mounting



## Product Overview

The ALAD-K1050T(P) is a tablet powered by Intel® Tiger lake U series processors. It adopts 10.1 "1280\*800 resolution LCD and fully fits surface projection multi-point capacitive/5 wire resistive touch screen. The product has a comprehensive I/O interface, supporting 1\*2.5"SATA disk and 1\*mSATA dual storage; Built-in 1\*Mini PCIe and 1\*M.2 3042/3052 expansions, wide voltage DC power supply from 9 to 36V, aluminum die-cast body without fan heat dissipation, various installation modes, suitable for intelligent MES system and device management HMI.

## Product Parameters

### System

CPU	Intel® Tigerlake U Celeron/Core i3/i5/i7 CPU, ULT SoC, TDP 12W/15W
RAM	1*DDR4, 3200Mhz SODIMM, 32GB max.
Graphics	Intel®UHD/ Intel® Iris® Xe Graphics: Intel DL boost, DirectX12.1, OpenGL 4.6 and OpenCL 3.0; HDMI:4096*2304@60Hz

### I/O Port

LAN	2*Intel I210AT, 10M-1000M, WOL
USB	4*USB3.2
Display	1*HDMI
Audio	1*Line out, Realtek ALC897,2*2W Speaker
Serial port	2*RS232/422/485

### LCD Display

Dimension	10.1" TFT LCD
Resolution	1280*800@60Hz
Max. colors	16.2M
Luminance(cd/m²)	350
Viewing Angle	85°(L), 85°(R), 85°(U), 85°(D)

### Touchscreen

Touch type	5-wire resistive touch screen/projected capacitive touch screen
Transmittance	83%/ $\geq$ 85%
Controller	USB

Storage	1*2.5" SATA3.0 HDD/SSD, 1*mSATA
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### Expansion

1*Mini PCIe(PCle&USB),PCIe module;
1*M.2 3042/3052(+SIM),4G LTE/5G NR

### Power Supply

Input voltage & TDP	DC IN 9~36V; 34.5W (CPU i7-1165G7, 8G DDR4, 128G SSD)
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### Mechanical

Structure	Aluminum die-casting front bezel , fin-shaped radiator shell
Dimension (W*H*D)	275*193*51mm Panel mounting opening size(W*H): 270*188mm
Installation	Panel/VESA(100*100/75*75mm)
Net Weight	1.85KG

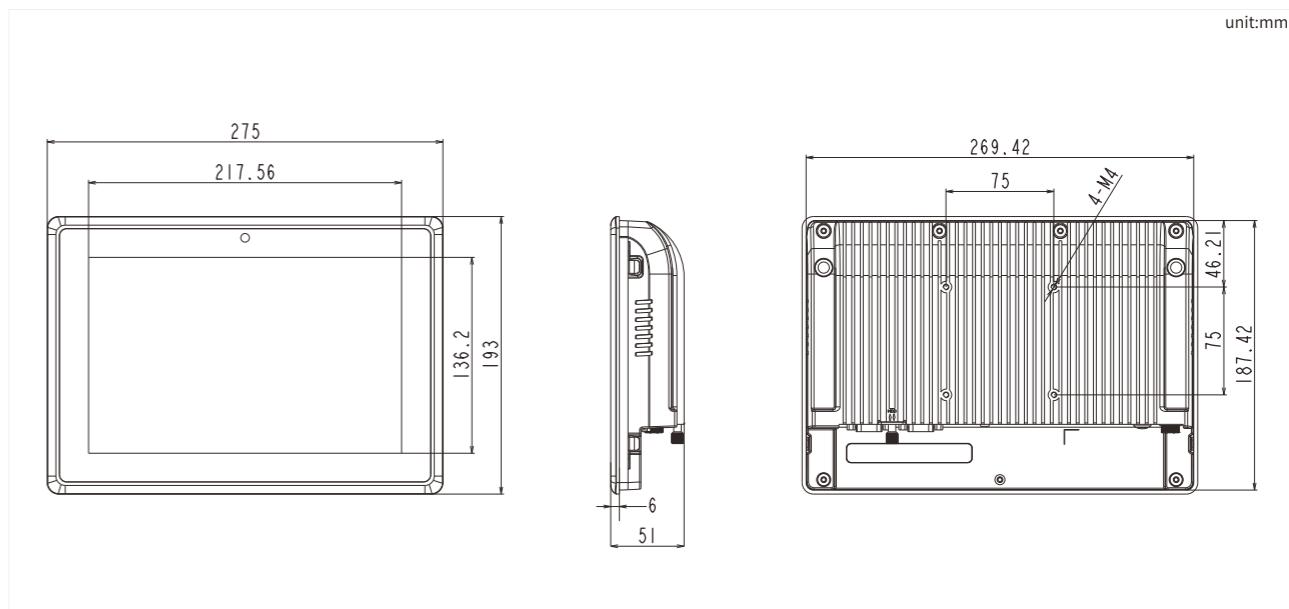
### Environmental

Operating Temp	0~50°C, HDD(-10~55°C, SSD),airflow
Storage Temp	-20°C~60°C
Storage Humidity	10~95%@40°C, non-condensing
Vibration	1g 5~500Hz,with HDD
Shock	10g peak acceleration(duration 11ms) with HDD
EMC	CE,FCC Class A
OS	Windows 11/10*IoT enterprise, Android,SUSE,Ubuntu,Wind River, Red Hat*Enterprise,Wind River VxWorks*7,Yocto

## I/O View



## Dimensions



## Ordering Information

Model	CPU	Touch Screen	Specifications
ALAD-K1050/ S001	Intel® Core i3-1115G4	T:	10.1" LCD, 2*COM, 4*USB3.2, 2*LAN, 1*HDMI,
ALAD-K1050/ S002	Intel® Core i5-1135G7	5-wire resistive touch screen	1*Mini PCIe, 1*M.2 B-Key , 1*Line out, 1*2.5"SATA Bay,
ALAD-K1050/ S003	Intel® Core i7-1165G7	T(P):	1*mSATA, 2*2W Speaker, DC 9~36V power input
ALAD-K1050/ S004	Intel® Celeron 6305E	Projected capacitive touch screen	
PA-60DC12	AC/DC power adapter, DC12V/5A, 60W		

# ALAD-K1250T(P)

12.1" TFT LCD Capacitive/Resistive Touch, Intel® Tigerlake CPU, 4\*COM, 2\*LAN, 4\*USB3.2, 1\*USB2.0, 1\* Line out, 1\*2.5"SATA, 1\*mSATA, DC 9~36V

## Key Specification

- Aluminum die-casting chassis
- 12.1" TFT LCD, Multi-point capacitive/5 wire resistive touch
- Intel® Tigerlake CPU, fanless design
- 1\*DDR4 3200 SODIMM, up to 32GB
- 1\*Mini PCIe, 1\*M.2 B-Key Type 3042/3052
- 4\*COM, 2\*LAN, 4\*USB3.2, 1\*USB2.0, 1\*8-bit DIO(opt.)
- 2.5"SATA Bay, 1\*mSATA, 1\*Line out, 2\*3W Speaker
- DC 9~36V power input
- Standard VESA mount and panel mounting



## Product Overview

The ALAD-K1250T(P) is a tablet powered by Intel® Tiger lake U series processors. It adopts 12.1 "1024\*768 resolution TFT LCD and fully fits surface projection multi-point capacitive/5 wire resistive touch screen. The product has a comprehensive I/O interface, supporting 1\*2.5" SATA disk and 1\*mSATA dual storage; Built-in 1\*Mini PCIe and 1\*M.2 3042/3052 expansions, wide voltage DC 9~36V, aluminum die-cast body without fan heat dissipation, various installation modes, suitable for intelligent MES system and device management HMI.

## Product Parameters

### System

CPU	Intel® Tigerlake U Celeron/Core i3/i5/i7 CPU, ULT SoC, TDP 12W/15W
RAM	1*DDR4, 3200Mhz SODIMM, 32GB max.
Graphics	Intel®UHD/ Intel® Iris® Xe Graphics: Intel DL boost, DirectX12.1, OpenGL 4.6 and OpenCL 3.0; HDMI:4096*2304@60Hz

### I/O Port

LAN	2*Intel I226V, 10M-1000M, WOL
USB	4*USB3.2, 1*USB2.0
Display	1*HDMI
Audio	1*Line out, Realtek ALC897,2*3W Speaker
Serial port	2*RS232/422/485+2*RS232

### LCD Display

Dimension	12.1" TFT LCD
Resolution	1024*768@60Hz
Max. colors	16.2M
Luminance (cd/m²)	500
Viewing Angle	80°(L), 80°(R), 70°(U), 70°(D)

### Touchscreen

Touch type	5-wire resistive touch screen/projected capacitive touch screen
Transmittance	83%/90%
Controller	USB

### Storage

Storage	1*2.5" SATA3.0 HDD/SSD, 1*mSATA
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### Expansion

Expansion	1*Mini PCIe(PCle&USB),PCIe module; 1*M.2 3042/3052(+SIM),4G LTE/5G NR
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### Power Supply

Input voltage & TDP	DC IN 9~36V; 11.52W (CPU i7-1165G7, 8G DDR4, 128G SSD)
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### Mechanical

Structure	Aluminum die-casting front bezel , fin-shaped radiator shell
Dimension (W*H*D)	315*259*51mm Panel mounting opening size(W*H): 303*247mm
Installation	Panel/VESA(100*100/75*75mm)
Net Weight	2.8KG

### Environmental

Operating Temp	0~50°C, HDD(-10~55°C, SSD),airflow
Storage Temp	-20°C~60°C
Storage Humidity	10~95%@40°C, non-condensing
Vibration	1g 5~500Hz,with HDD
Shock	10g peak acceleration(duration 11ms) with HDD
EMC	CE,FCC Class A

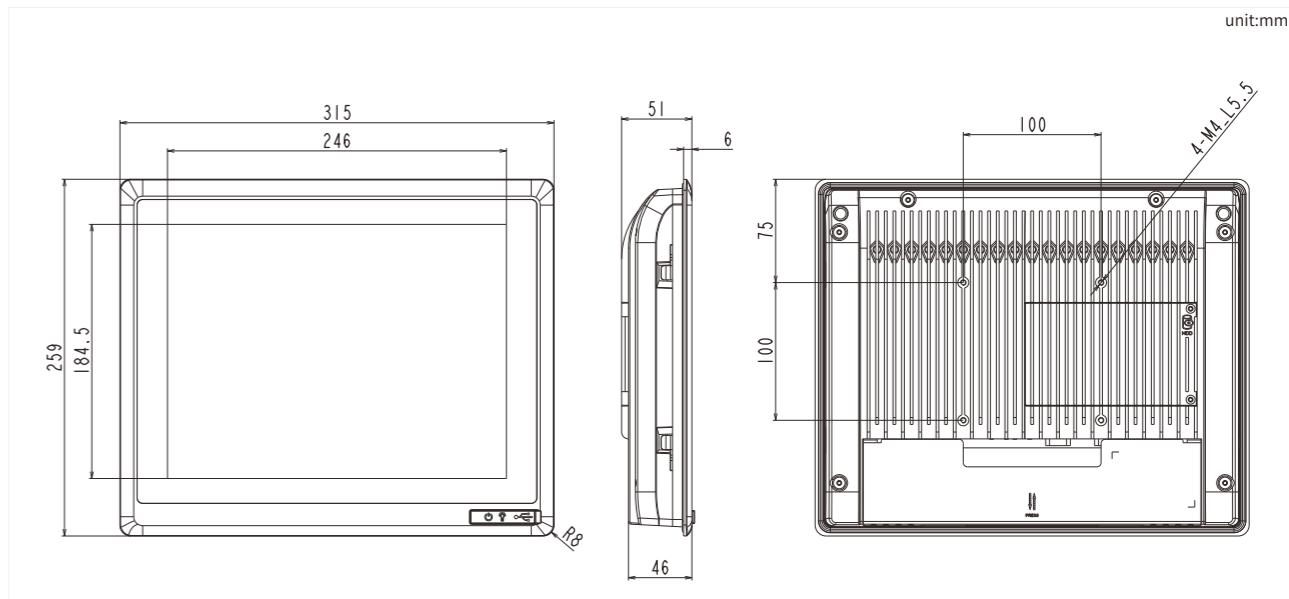
### OS

Windows 11/10*IoT enterprise,
Android,SUSE,Ubuntu,Wind River,
Red Hat*Enterprise,Wind River
VxWorks*7,Yocto

## I/O View



## Dimensions



## Ordering Information

Model	Processor	Touch Screen	Specifications
ALAD-K1250/ S001	Intel® Core i3-1115G4	T:	
ALAD-K1250/ S002	Intel® Core i5-1135G7	5-wire resistive touch screen	T(P): Projected capacitive touch screen
ALAD-K1250/ S003	Intel® Core i7-1165G7		12.1" TFT LCD, 4*COM, 4*USB3.2, 1*USB2.0, 2*LAN, 1*HDMI, 1*Mini PCIe, 1*M.2 B-Key , 1*Line out, 1*2.5"SATA Bay, 1*mSATA, 2*3W Speaker, DC 9~36V
ALAD-K1250/ S004	Intel® Celeron 6305E		
PA-60DC12	AC/DC power adapter, DC12V/5A, 60W		1*COM adapter cable (one drag two, DB9 form)

# ALAD-K1550T(P)

15.6" TFT LCD Capacitive Touch, Intel® Tigerlake CPU, 4\*COM, 2\*LAN, 4\*USB3.2, 1\* Line out, 1\*2.5" SATA bay, 1\*mSATA, DC 9~36V

## Key Specification

- Aluminum die-casting chassis, Full Flat Mirror Panel
- 15.6" Full HD LCD, Multi-point capacitive touch
- Intel® Tigerlake CPU, fanless design
- 1\*DDR4 3200 SODIMM, up to 32GB
- 1\*Mini PCIe, 1\*M.2 B-Key Type 3042/3052
- 4\*COM, 2\*LAN, 4\*USB3.2, 1\*8-bit DIO (opt.)
- 2.5" SATA Bay, 1\*mSATA, 1\*Line out, 2\*3W Speaker
- Optional 1\*PCIeX4 slot (PCIE4 signal) or 1\*PCI slot expansion
- DC 9~36V power input
- Standard VESA mount and panel mounting



## Product Overview

ALAD-K1550T(P) is a full flat mirror panel powered by an Intel® Tiger lake U series processor. It adopts 15.6 "1920\*1080 resolution full HD TFT LCD and fully fits surface projection multi-point capacitive touch screen. The product has a comprehensive I/O interface, supporting 1\*2.5" SATA disk and 1\*mSATA dual storage; Built-in 1\*Mini PCIe and 1\*M.2 3042/3052 expansions, wide voltage DC power supply from 9 to 36V, aluminum die-cast body without fan heat dissipation, various installation modes, suitable for intelligent MES system and device management HMI.

## Product Parameters

System	
CPU	Intel® Tigerlake U Celeron/Core i3/i5/i7 CPU, ULT SoC, TDP 12W/15W; Intel® CPU SoC MCP
RAM	1*DDR4 3200 MHz SODIMM, 32GB max.
Graphics	
Graphics	15.6 "1920*1080@60Hz Full HD TFT LCD, 1*HDMI for extended display Intel UHD Graphics or iRIS® Xe Graphics, Supports the Intel DL boost deep learning to strengthen technology, DirectX12.1, OpenGL 4.6 and OpenCL 3.0, HDMI: 4096*2304@60Hz

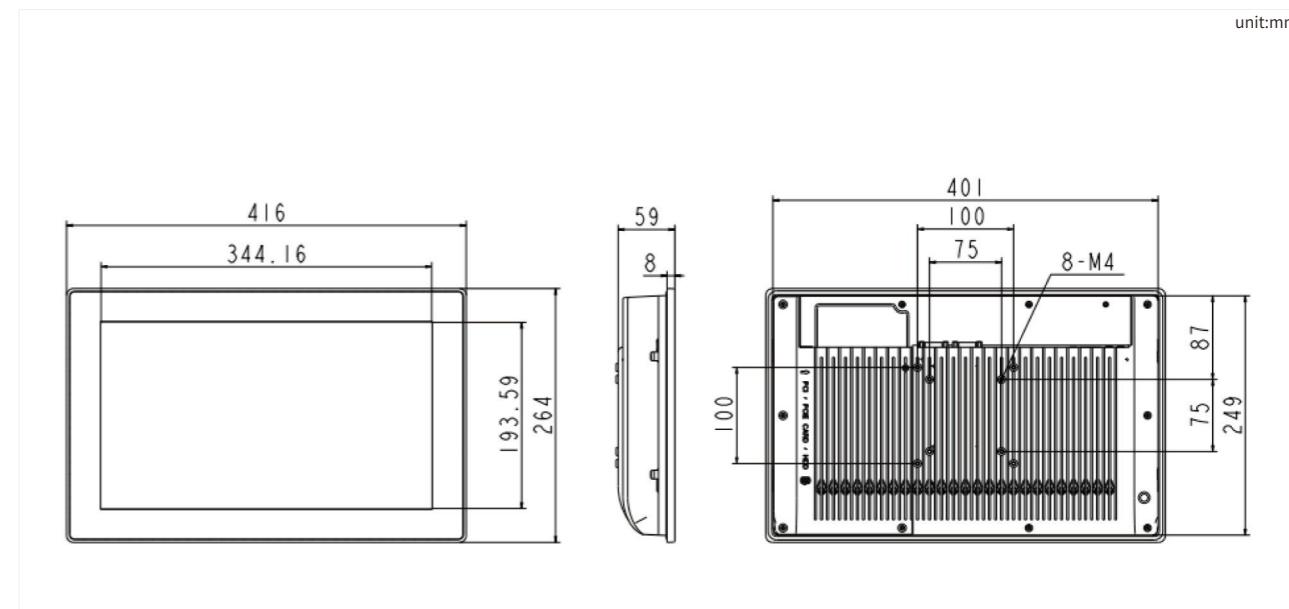
I/O Port	
LAN	2*Intel I226V, 10M-1000M, WOL
USB	4*USB3.2
Display	1*HDMI
Audio	1*Line out,Realtek ALC897, 2*3W Speaker
Serial port	2*RS232, 2*RS232/422/485 (DB9)
LCD Display	
Dimension	15.6" TFT LED
Resolution	1920*1080
Max. colors	16.2M
Luminance(cd/m²)	350
Viewing Angle	85°(L), 85°(R), 85°(U), 85°(D)

Touch Screen	
Touch type	Projected capacitive touch
Light Transmission	≥85%
Controller	EETI Industrial grade

## I/O View



## Dimensions



## Ordering Information

Model	CPU	Touch Screen	Specifications
ALAD-K1550T(P)/S001	Intel® Core i3-1115G4	T(P):	Industrial panel computer, 15.6" TFT LCD, 4*COM, 4*USB3.2, 1*USB2.0, 2*LAN, 1*HDMI, 1*Mini PCIe, 1*M.2 B-Key, 1*Line out, 1*2.5" SATA Bay, 1*mSATA, 2*3W Speaker, DC 9~36V power input
ALAD-K1550T(P)/S002	Intel® Core i5-1135G7		
ALAD-K1550T(P)/S003	Intel® Core i7-1165G7	Projected Capacitive Touch	
ALAD-K1550T(P)/S004	Intel® Celeron 6305E		
ECX-168	1*PCIeX4 slot(X4 signal) (non COM3&4 in use)		
ECI-169	1*32-bit PCI slot (non COM3&4 in use)		
PA-60DC12	AC/DC power adapter, DC12V@5A, 60W		
PA-120DC19	AC/DC power adapter, DC19V@6.32A, 120W (when use POE network card for expansion)		

# ALAD-K1551T(P)

15" TFT LCD Capacitive/Resistive Touch, Intel® Tigerlake CPU, 4\*COM, 2\*LAN, 4\*USB3.2, 1\*USB2.0, 1\* Line out, 1\*2.5"SATA, 1\*mSATA, DC 9~36V

## Key Specification

- Aluminum die-casting chassis
- 15" TFT LCD, Multi-point capacitive touch
- Intel® Tigerlake CPU, fanless design
- 1\*DDR4 3200 SODIMM, up to 32GB
- 1\*Mini PCIe, 1\*M.2 B-Key Type 3042/3052
- 4\*COM, 2\*LAN, 4\*USB3.2, 1\*USB2.0, 1\*8-bit DIO(opt.)
- 2.5"SATA Bay, 1\*mSATA, 1\*Line out, 2\*3W Speaker
- Optional 1\*PCIeX4 slot (PCIE4 signal) or 1\*PCI slot
- DC 9~36V power input
- Standard VESA mount and panel mounting



## Product Overview

The ALAD-K1551T/T(P) is an industrial tablet powered by Intel® Tiger lake U series processors. It adopts 15 "1024\*768 resolution TFT LCD and fully fits surface projection multi-point capacitive touch screen. The product has a comprehensive I/O interface, supporting 1\*2.5"SATA disk and 1\*mSATA dual storage; Built-in 1\*Mini PCIe and 1\*M.2 3042/3052 expansions, wide voltage DC power supply from 9 to 36V, aluminum die-cast body without fan heat dissipation, various installation modes, suitable for intelligent MES system and device management HMI.

## Product Parameters

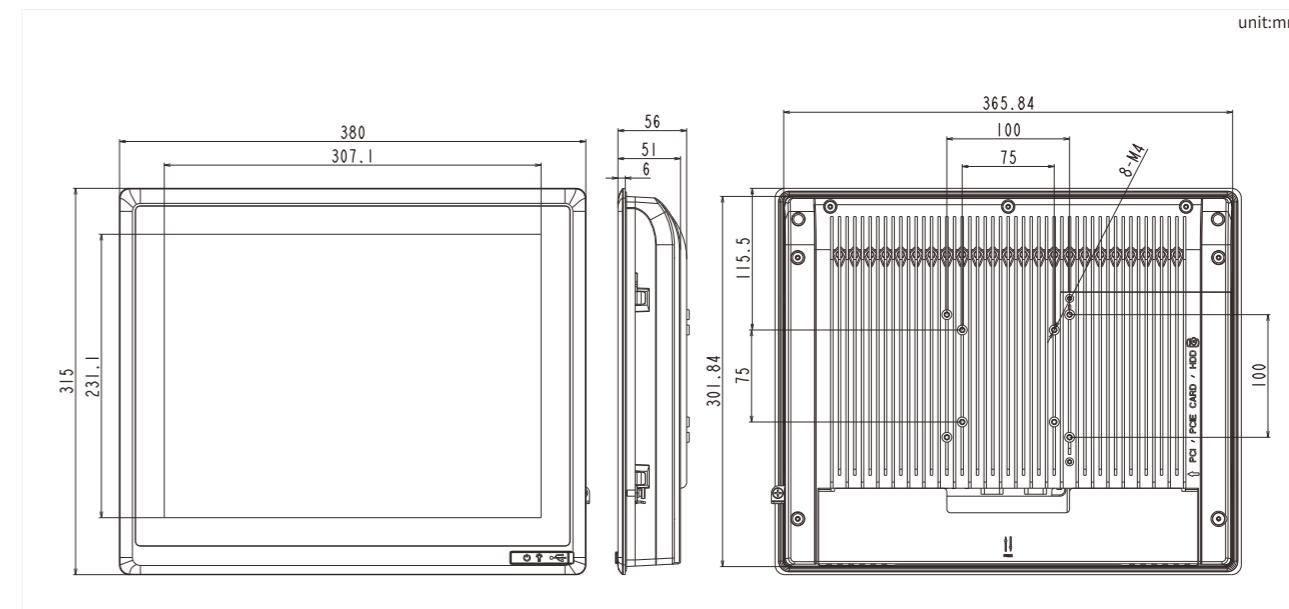
System	
CPU	Intel® Tigerlake U Celeron/Core i3/i5/i7 CPU, ULT SoC, TDP 12W/15W
RAM	1*DDR4, 3200MHz SODIMM, 32GB max.
Graphics	Intel®UHD/ Intel® Iris® Xe Graphics: Intel DL boost, DirectX12.1, OpenGL 4.6 and OpenCL 3.0; HDMI:4096*2304@60Hz
I/O Port	
LAN	2*Intel I226V, 10M-1000M, WOL
USB	4*USB3.2, 1*USB2.0
Display	1*HDMI
Audio	1*Line out, Realtek ALC897, 2*3W Speaker
Serial port	2*RS232/422/485+2*RS232
LCD Display	
Dimension	15.0" TFT LCD
Resolution	1024*768@60Hz
Max. colors	16.2M
Luminance(cd/m²)	350
Viewing Angle	80°(L), 80°(R), 80°(U), 80°(D)
Touchscreen	
Touch type	5-wire resistive touch screen/projected capacitive touch screen
Transmittance	83%/90%
Controller	USB
Storage	
Storage	1*2.5" SATA3.0 HDD/SSD, 1*mSATA

Expansion	
Expansion	1*Mini PCIe(PCle&USB),PCIe module; 1*M.2 3042/3052(+SIM), 4G LTE/5G NR (Opt.)1*PCIeX4(X4)/1*32-bit PCI
Power Supply	
Input voltage & TDP	DC IN 9~36V; 11.52W (CPU i7-1165G7, 8G DDR4, 128G SSD)
Mechanical	
Structure	Aluminum die-casting front bezel , fin-shaped radiator shell
Dimension (W*H*D)	380*315*56mm Panel mounting opening size(W*H): 368*303mm
Installation	Panel/Rack/VESA(100*100/75*75mm)
Net Weight	4.3KG
Environmental	
Operating Temp	0~50°C, HDD(-10~55°C, SSD), airflow
Storage Temp	-20°C~60°C
Storage Humidity	10~95%@40°C, non-condensing
Vibration	1g 5~500Hz,with HDD
Shock	10g peak acceleration(duration 11ms) with HDD
EMC	CE,FCC Class A
OS	
	Windows 11/10*IoT enterprise, Android, SUSE, Ubuntu, Wind River, Red Hat*Enterprise, Wind River VxWorks*7, Yocto

## I/O View



## Dimensions



## Ordering Information

Model	Processor	Touch Screen	Specifications
ALAD-K1551/ S001	Intel® Core i3-1115G4	T:	15" TFT LCD, 4*COM, 4*USB3.2, 1*USB2.0, 2*LAN, 1*HDMI, 1*Mini PCIe, 1*M.2 B-Key , 1*Line out, 1*2.5"SATA, 1*mSATA, 2*3W Speaker, DC 9~36V
ALAD-K1551/ S002	Intel® Core i5-1135G7	5 wire resistive touch	T(P): Projected Capacitive Touch
ALAD-K1551/ S003	Intel® Core i7-1165G7		
ALAD-K1551/ S004	Intel® Celeron 6305E		
ECX-168	1*PCIeX4 slot(X4) (non COM3&4 in use)		
ECI-169	1*32-bit PCI slot (non COM3&4 in use)		
PA-60DC12	AC/DC power adapter, DC12V@5A ,60W		
PA-120DC19	AC/DC power adapter, DC19V@6.32A ,120W (when use POE network card for expansion)		

# ALAD-K1750T(P)

17.0" TFT LCD Capacitive/Resistive Touch, Intel® Tigerlake CPU, 4\*COM, 2\*LAN, 4\*USB3.2, 1\*USB2.0, 1\* Line out, 1\*2.5"SATA, 1\*mSATA, DC 9~36V

## Key Specification

- Aluminum die-casting chassis
- 17.0" TFT LCD, Multi-point capacitive/5 wire resistive touch
- Intel® Tigerlake CPU, fanless design
- 1\*DDR4 3200 SODIMM, up to 32GB
- 1\*Mini PCIe, 1\*M.2 B-Key Type 3042/3052
- 4\*COM, 2\*LAN, 4\*USB3.2, 1\*USB2.0, 1\*8-bit DIO(opt.)
- 2.5" SATA Bay, 1\*mSATA, 1\*Line out, 2\*3W Speaker
- DC 9~36V power input
- Standard VESA mount and panel mounting



## Product Overview

The ALAD-K1750T/T(P) is a tablet powered by Intel® Tiger lake U series processors. It adopts 17.0 "1280\*1024 resolution TFT LCD and fully fits surface projection multi-point capacitive/5 wire resistive touch screen. The product has a comprehensive I/O interface, supporting 1\*2.5 "SATA disk and 1\*mSATA dual storage; Built-in 1\*Mini PCIe and 1\*M.2 3042/3052 expansions, wide voltage DC power supply from 9 to 36V, aluminum die-cast body without fan heat dissipation, various installation modes, suitable for intelligent MES system and device management HMI.

## Product Parameters

System	
CPU	Intel® Tigerlake U Celeron/Core i3/i5/i7 CPU, ULT SoC, TDP 12W/15W
RAM	1*DDR4, 3200Mhz SODIMM, 32GB max.
Intel®UHD/ Intel® Iris® Xe Graphics:	
Graphics	Intel DL boost, DirectX12.1, OpenGL 4.6 and OpenCL 3.0; HDMI:4096*2304@60Hz

I/O Port	
LAN	2*Intel I226V, 10M-1000M, WOL
USB	4*USB3.2, 1*USB2.0
Display	1*HDMI
Audio	1*Line out, Realtek ALC897, 2*3W Speaker
Serial port	2*RS232/422/485+2*RS232

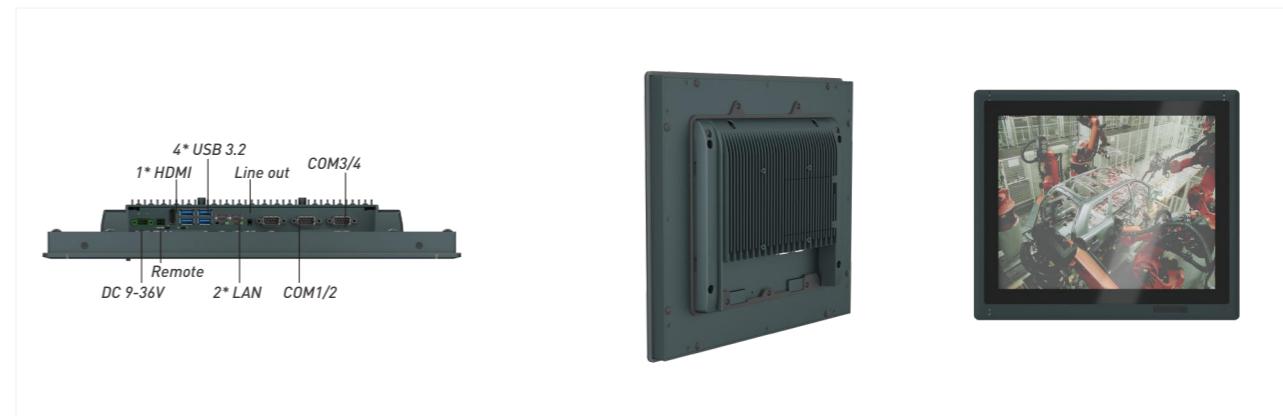
LCD Display	
Dimension	17.0" TFT LCD
Resolution	1280*1024@60Hz
Max. colors	16.2M
Luminance (cd/m²)	350
Viewing Angle	80°(L), 80°(R), 80°(U), 80°(D)
Touchscreen	
Touch type	5-wire resistive touch screen/projected capacitive touch screen
Transmittance	83%/90%
Controller	USB
Storage	
Storage	1*2.5" SATA3.0 HDD/SSD, 1*mSATA

Expansion	
Expansion	1*Mini PCIe(PCle&USB),PCIe module; 1*M.2 3042/3052(+SIM), 4G LTE/5G NR
Power Supply	
Input voltage & TDP	DC IN 9~36V; 11.52W (CPU i7-1165G7, 8G DDR4, 128G SSD)
Mechanical	

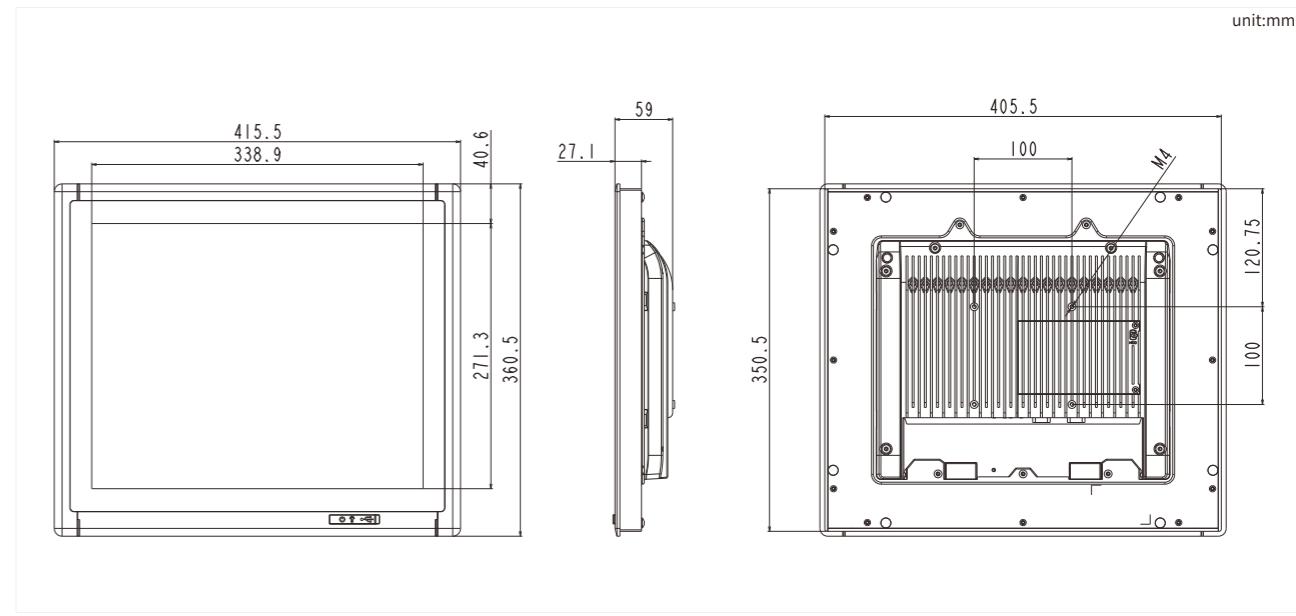
Mechanical	
Structure	Aluminum die-casting front bezel , fin-shaped radiator shell
Dimension (W*H*D)	415.5*360.5*59mm Panel mounting opening size(W*H): 407*352mm
Installation	Panel/Rack/VESA(100*100/75*75mm)
Net Weight	6.1KG

Environmental	
Operating Temp	0~50°C, HDD(-10~55°C, SSD), airflow
Storage Temp	-20°C~60°C
Storage Humidity	10~95%@40°C, non-condensing
Vibration	1g 5~500Hz,with HDD
Shock	10g peak acceleration(duration 11ms) with HDD
EMC	CE,FCC Class A
OS	Windows 11/10*IoT enterprise, Android, SUSE, Ubuntu, Wind River, Red Hat*Enterprise, Wind River, VxWorks*7, Yocto

## I/O View



## Dimensions



## Ordering Information

Model	Processor	Touch Screen	Specifications
ALAD-K1750/S001	Intel® Core i3-1115G4	T: 5-wire resistive touch screen	T(P): Projected capacitive touch screen
ALAD-K1750/S002	Intel® Core i5-1135G7		17" TFT LCD, 4*COM, 2*LAN, 4*USB3.2, 1*USB2.0, 1*HDMI, 1*Mini PCIe, 1*M.2 B-Key, 1*Line out, 1*2.5"SATA, 1*mSATA, 2*3W Amplifier, DC 9~36V
ALAD-K1750/S003	Intel® Core i7-1165G7		
ALAD-K1750/S004	Intel® Celeron 6305E		
PA-60DC12	AC/DC power adapter, DC12V/5A, 60W		1*COM adapter cable (one drag two, DB9 form)

# ALAD-K1850T(P)

18.5" TFT LCD Capacitive Touch, Intel® Tigerlake CPU, 4\*COM, 2\*LAN, 4\*USB3.2, 1\* Line out, 1\*2.5" SATA, 1\*mSATA, DC 9~36V

## Key Specification

- Aluminum die-casting chassis
- 18.5" TFT LCD, Multi-point capacitive touch
- Intel® Tigerlake CPU, fanless design
- 1\*DDR4 3200 SODIMM, up to 32GB
- 1\*Mini PCIe, 1\*M.2 B-Key Type 3042/3052
- 4\*COM, 2\*LAN, 4\*USB3.2, 1\*8-bit DIO (opt.)
- 2.5" SATA Bay, 1\*mSATA, 1\*Line out, 2\*3W Speaker
- DC 9~36V power input
- Standard VESA mount and panel mounting



## Product Overview

The ALAD-K1850T(P) is a tablet powered by Intel® Tiger lake U-series processors. It adopts 18.5 "1366\*768 resolution TFT LCD and fully fits surface projection multi-point capacitive touch screen. The product has a comprehensive I/O interface, supporting 1\*2.5 "SATA disk and 1\*mSATA dual storage; Built-in 1\*Mini PCIe and 1\*M.2 3042/3052 expansions, wide voltage DC power supply from 9 to 36V, aluminum die-cast body without fan heat dissipation, various installation modes, suitable for intelligent MES system and device management HMI.

## Product Parameters

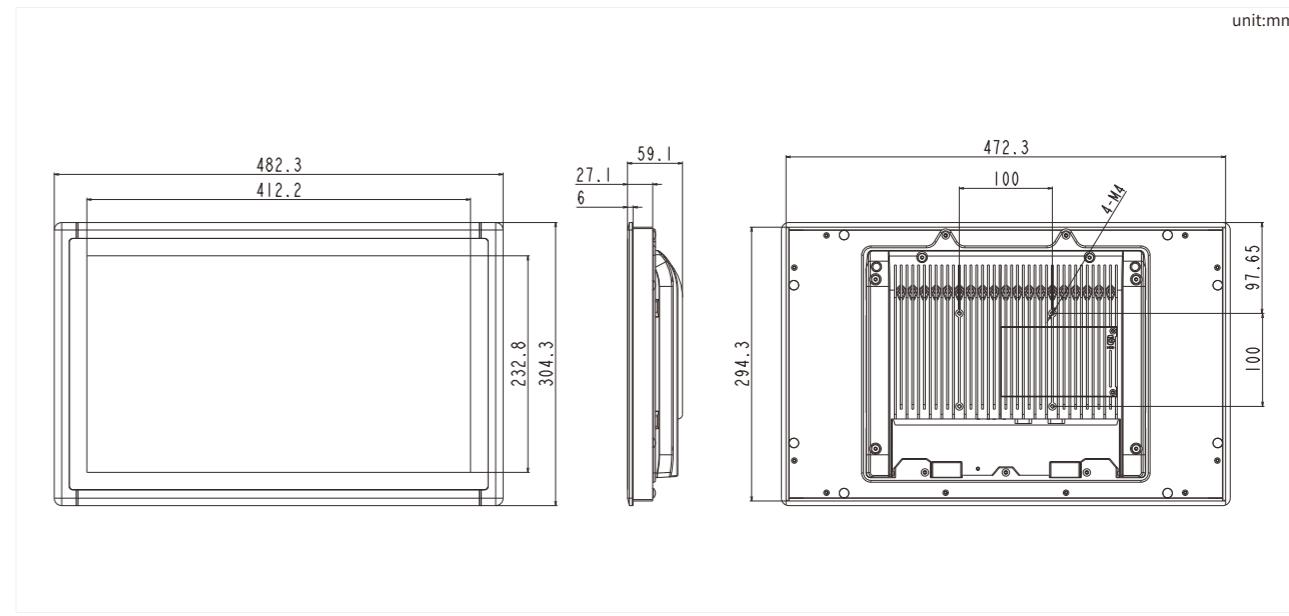
System	
CPU	Intel® Tigerlake U Celeron/Core i3/i5/i7 CPU, ULT SoC, TDP 12W/15W
RAM	1*DDR4, 3200Mhz SODIMM, 32GB max.
Graphics	Intel®UHD/ Intel® Iris® Xe Graphics: Intel DL boost, DirectX12.1, OpenGL 4.6 and OpenCL 3.0; HDMI:4096*2304@60Hz
I/O Port	
LAN	2*Intel I226V, 10M-1000M, WOL
USB	4*USB3.2
Display	1*HDMI
Audio	1*Line out, Realtek ALC897,2*3W Speaker
Serial port	2*RS232/422/485+2*RS232
LCD Display	
Dimension	18.5" TFT LCD
Resolution	1366*768@60Hz
Max. colors	16.2M
Luminance (cd/m²)	350
Viewing Angle	85°(L), 85°(R), 80°(U), 80°(D)
Touchscreen	
Touch type	projected capacitive touch screen
Transmittance	90%
Controller	USB
Storage	
Storage	1*2.5" SATA3.0 HDD/SSD, 1*mSATA

Expansion	
Expansion	1*Mini PCIe(PCle&USB),PCIe module; 1*M.2 3042/3052(+SIM),4G LTE/5G NR
Power Supply	
Input voltage & TDP	DC IN 9~36V; 11.52W (CPU i7-1165G7, 8G DDR4, 128G SSD)
Mechanical	
Structure	Aluminum die-casting front bezel , fin-shaped radiator shell
Dimension (W*H*D)	483*305*59mm Panel mounting opening size(W*H): 474*396mm
Installation	Panel/VESA(100*100/75*75mm)
Net Weight	6.63KG
Environmental	
Operating Temp	0~50°C, HDD(-10~55°C, SSD),airflow
Storage Temp	-20°C~60°C
Storage Humidity	10~95%@40°C, non-condensing
Vibration	1g 5~500Hz,with HDD
Shock	10g peak acceleration(duration 11ms) with HDD
EMC	CE,FCC Class A
OS	
	Windows 11/10*IoT enterprise, Android,SUSE,Ubuntu,Wind River, Red Hat*Enterprise,Wind River VxWorks*7,Yocto

## I/O View



## Dimensions



## Ordering Information

Model	Processor	Touch Screen	Specifications
ALAD-K1850T(P)/S001	Intel® Core i3-1115G4	T(P): Projected capacitive touch screen	18.5" TFT LCD, 4*COM, 2*LAN, 4*USB3.2, 1*HDMI, 1*Mini PCIe, 1*M.2 B-Key, 1*Line out, 1*2.5"SATA, 1*mSATA, 2*3W Amplifier, DC 9~36V
ALAD-K1850T(P)/S002	Intel® Core i5-1135G7		
ALAD-K1850T(P)/S003	Intel® Core i7-1165G7		
ALAD-K1850T(P)/S004	Intel® Celeron 6305E		
PA-60DC12	AC/DC power adapter, DC12V/5A, 60W		
	1*COM adapter cable (one drag two, DB9 form)		

# ALAD-K1950T(P)

19.0" TFT LCD Capacitive/Resistive Touch, Intel® Tigerlake CPU, 4\*COM, 2\*LAN, 4\*USB3.2, 1\*USB2.0, 1\* Line out, 1\*2.5"SATA, 1\*mSATA, DC 9~36V

## Key Specification

- Aluminum die-casting chassis
- 19.0" TFT HD LCD, Multi-point capacitive/5 wire resistive touch
- Intel® Tigerlake CPU, fanless design
- 1\*DDR4 3200 SODIMM, up to 32GB
- 1\*Mini PCIe, 1\*M.2 B-Key Type 3042/3052
- 4\*COM, 2\*LAN, 4\*USB3.2, 1\*USB2.0, 1\*8-bit DIO (opt.)
- 2.5"SATA Bay, 1\*mSATA, 1\*Line out, 2\*3W Speaker
- Optional 1\*PCIeX4(X4) or 1\*PCI
- DC 9~36V power input
- Standard VESA mount and panel mounting



## Product Overview

The ALAD-K1950T/T(P) is a tablet powered by Intel® Tiger lake U-series processors. It adopts 19.0 "1280\*1024 resolution TFT LCD and fully fits surface projection multi-point capacitive/5 wire resistive touch. The product has a comprehensive I/O interface, supporting 1\*2.5 "SATA disk and 1\*mSATA dual storage; Built-in 1\*Mini PCIe and 1\*M.2 3042/3052 expansions, wide voltage DC power supply from 9 to 36V, aluminum die-cast body without fan heat dissipation, various installation modes, suitable for intelligent MES system and device management HMI.

## Product Parameters

System	
CPU	Intel® Tigerlake U Celeron/Core i3/i5/i7 CPU, ULT SoC, TDP 12W/15W
RAM	1*DDR4, 3200MHz SODIMM, 32GB max.
Graphics	Intel®UHD/ Intel® Iris® Xe Graphics: Intel DL boost, DirectX12.1, OpenGL 4.6 and OpenCL 3.0; HDMI:4096*2304@60Hz

I/O Port	
LAN	2*Intel I226V, 10M-1000M, WOL
USB	4*USB3.2, 1*USB2.0
Display	1*HDMI
Audio	1*Line out, Realtek ALC897, 2*3W Speaker
Serial port	2*RS232/422/485+2*RS232

LCD Display	
Dimension	19.0" TFT LCD
Resolution	1280*1024@60Hz
Max. colors	16.7M
Luminance (cd/m²)	470
Viewing Angle	85°(L), 85°(R), 85°(U), 85°(D)
Touchscreen	
Touch type	5-wire resistive touch screen/projected capacitive touch screen
Transmittance	83%/90%
Controller	USB
Storage	
Storage	1*2.5" SATA3.0 HDD/SSD, 1*mSATA

Expansion	
Expansion	1*Mini PCIe(PCle&USB),PCle module; 1*M.2 3042/3052(+SIM), 4G LTE/5G NR
Power Supply	
Input voltage & TDP	DC IN 9~36V; 11.52W (CPU i7-1165G7, 8G DDR4, 128G SSD)

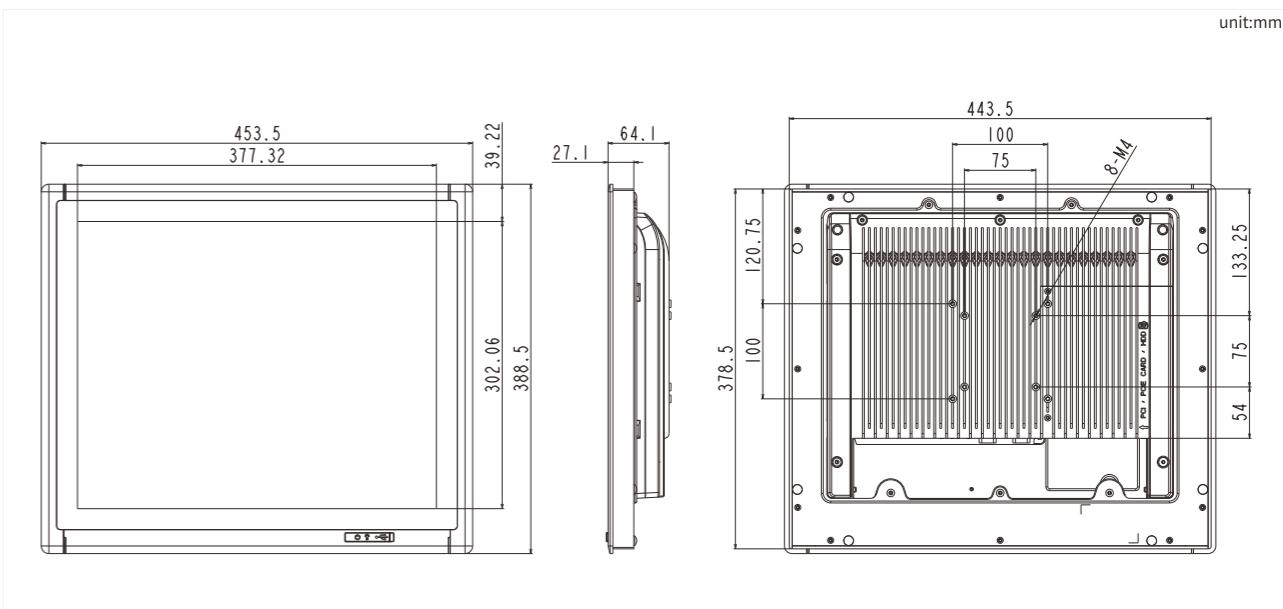
Mechanical	
Structure	Aluminum die-casting front bezel , fin-shaped radiator shell
Dimension (W*H*D)	453.5*388.5*64mm Panel mounting opening size(W*H): 445*380mm
Installation	Panel/Rack/VESA(100*100/75*75mm)
Net Weight	6.9KG

Environmental	
Operating Temp	0~50°C, HDD(-10~55°C, SSD), airflow
Storage Temp	-20°C~60°C
Storage Humidity	10~95%@40°C, non-condensing
Vibration	1g 5~500Hz,with HDD
Shock	10g peak acceleration(duration 11ms) with HDD
EMC	CE,FCC Class A
OS	Windows 11/10*IoT enterprise, Android,SUSE,Ubuntu, Wind River, Red Hat*Enterprise, Wind River VxWorks*7, Yocto

## I/O View



## Dimensions



## Ordering Information

Model	Processor	Touch Screen	Specifications
ALAD-K1950/S001	Intel® Core i3-1115G4	T:	19" TFT LCD, 4*COM, 2*LAN, 4*USB3.2, 1*USB2.0, 1*HDMI, 1*Mini PCIe, 1*M.2 B-Key, 1*Line out, 1*2.5"SATA, 1*mSATA, 2*3W Amplifier, DC 9~36V
ALAD-K1950/S002	Intel® Core i5-1135G7	5-wire resistive touch screen	T(P): Projected capacitive touch screen
ALAD-K1950/S003	Intel® Core i7-1165G7		
ALAD-K1950/S004	Intel® Celeron 6305E		
ECX-168		1*PCIeX4 slot(X4 signal) (non COM3&4 in use)	
ECI-169		1*32-bit PCI slot (non COM3&4 in use)	
PA-60DC12		AC/DC power adapter, DC12V@5A ,60W	
PA-120DC19		AC/DC power adapter, DC19V@6.32A ,120W (when use POE network card for expansion)	

# ALAD-K2150T(P)

21.5" TFT LCD Capacitive Touch, Intel® Tigerlake CPU, 4\*COM, 2\*LAN, 4\*USB3.2, 1\* Line out, 1\*2.5" SATA, 1\*mSATA, DC 9~36V

## Key Specification

- Aluminum die-casting chassis
- 21.5" TFT LCD, Multi-point capacitive touch
- Intel® Tigerlake CPU, fanless design
- 1\*DDR4 3200 SODIMM, up to 32GB
- 1\*Mini PCIe, 1\*M.2 B-Key Type 3042/3052
- 4\*COM, 2\*LAN, 4\*USB3.2, 1\*8-bit DIO (opt.)
- 2.5"SATA Bay, 1\*mSATA, 1\*Line out, 2\*3W Speaker
- Optional 1\*PCIeX4 slot (PCIE4 signal) or 1\*PCI slot
- DC 9~36V power input
- Standard VESA mount and panel mounting



## Product Overview

ALAD-K2150T(P) is a tablet powered by Intel® Tiger lake U series processors. It adopts 21.5 "1920\*1080 resolution TFT LCD and fully fits surface projection multi-point capacitive touch screen. The product has a comprehensive I/O interface, supporting 1\*2.5 "SATA disk and 1\*mSATA dual storage; Built-in 1\*Mini PCIe and 1\*M.2 3042/3052 expansions, wide voltage DC power supply from 9 to 36V, aluminum die-cast body without fan heat dissipation, various installation modes, suitable for intelligent MES system and device management HMI.

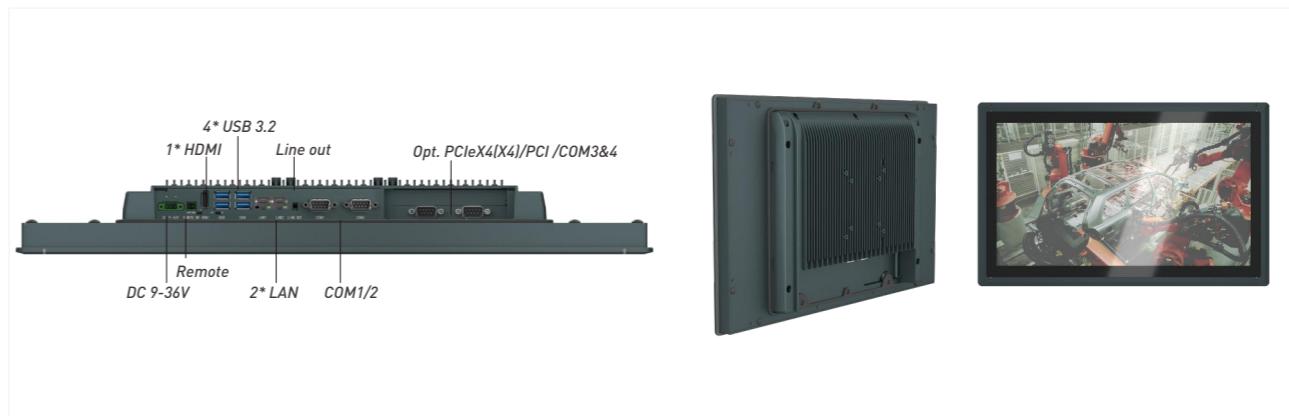
## Product Parameters

System	
CPU	Intel® Tigerlake U Celeron/Core i3/i5/i7 CPU, ULT SoC, TDP 12W/15W
RAM	1*DDR4, 3200Mhz SODIMM, 32GB max.
Graphics	Intel®UHD/ Intel® Iris® Xe Graphics: Intel DL boost, DirectX12.1, OpenGL 4.6 and OpenCL 3.0; HDMI:4096*2304@60Hz
I/O Port	
LAN	2*Intel I226V, 10M-1000M, WOL
USB	4*USB3.2
Display	1*HDMI
Audio	1*Line out, Realtek ALC897,2*3W Speaker
Serial port	2*RS232/422/485+2*RS232
LCD Display	
Dimension	21.5" TFT LCD
Resolution	1920*1080@60Hz
Max. colors	16.7M
Luminance (cd/m²)	300
Viewing Angle	89°(L), 89°(R), 89°(U),89°(D)
Touchscreen	
Touch type	projected capacitive touch screen
Transmittance	90%
Controller	USB
Storage	
Storage	1*2.5" SATA3.0 HDD/SSD, 1*mSATA

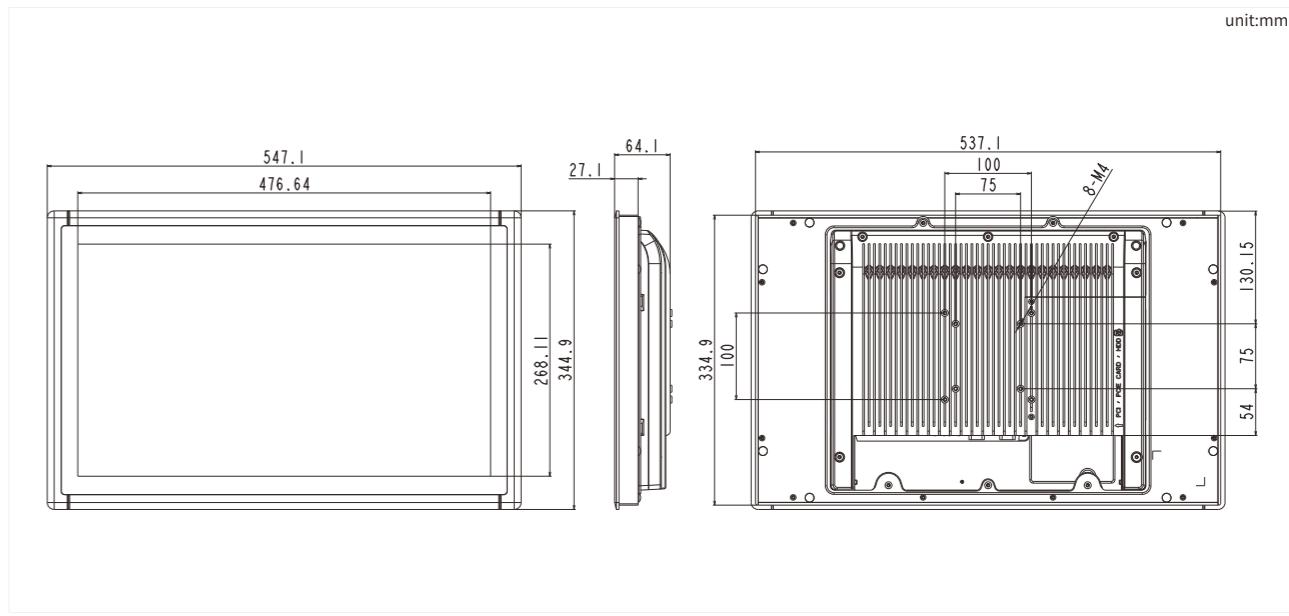
  

Expansion	
Expansion	1*Mini PCIe(PCle&USB),PCIe/USB module; 1*M.2 B-Key 3042/3052(+SIM), 4G LTE/5G NR; Opt. 1*PCIeX4 (X4) or 1*32 bit PCI
Power Supply	
Input voltage & TDP	DC IN 9~36V; 11.52W (CPU i7-1165G7, 8G DDR4, 128G SSD)
Mechanical	
Structure	Aluminum die-casting front bezel , fin-shaped radiator shell
Dimension (W*H*D)	574*345*64mm Panel mounting opening size(W*H): 538*335mm
Installation	Panel/VESA(100*100/75*75mm)
Net Weight	8.15KG
Environmental	
Operating Temp	0~50°C, HDD(-10~55°C, SSD),airflow
Storage Temp	-20°C~60°C
Storage Humidity	10~95%@40°C, non-condensing
Vibration	1g 5~500Hz,with HDD
Shock	10g peak acceleration(duration 11ms) with HDD
EMC	CE,FCC Class A
OS	
	Windows 11/10*IoT enterprise, Android,SUSE,Ubuntu, Wind River, Red Hat*Enterprise, Wind River VxWorks*7, Yocto

## I/O View



## Dimensions



## Ordering Information

Model	Processor	Touch Screen	Specifications
ALAD-K2150T(P)/S001	Intel® Core i3-1115G4		
ALAD-K2150T(P)/S002	Intel® Core i5-1135G7	T(P): Projected capacitive touch screen	21.5" TFT LCD, 4*COM, 2*LAN, 4*USB3.2, 1*HDMI, 1*Mini PCIe, 1*M.2 B-Key, 1*Line out, 1*2.5"SATA, 1*mSATA, 2*3W Amplifier, DC 9~36V
ALAD-K2150T(P)/S003	Intel® Core i7-1165G7		
ALAD-K2150T(P)/S004	Intel® Celeron 6305E		
ECX-168	1*PCIeX4 slot (X4 signal) (non COM3&4 in use)		
ECI-169	1*32-bit PCI slot (non COM3&4 in use)		
PA-60DC12	AC/DC power adapter, DC12V@5A ,60W		
PA-120DC19	AC/DC power adapter, DC19V@6.32A ,120W (when use POE network card for expansion)		

# ALAD-K2350T(P)

23.8" TFT LCD Capacitive Touch, Intel® Tigerlake CPU, 4\*COM, 2\*LAN, 4\*USB3.2, 1\* Line out, 1\*2.5" SATA bay, 1\*mSATA, DC 9~36V

## Key Specification

- Aluminum die-casting chassis, Full Flat Mirror Panel
- 23.8" Full HD LCD, Multi-point capacitive touch
- Intel® Tigerlake CPU, fanless design
- 1\*DDR4 3200 SODIMM, up to 32GB
- 1\*Mini PCIe, 1\*M.2 B-Key Type 3042/3052
- 4\*COM, 2\*LAN, 4\*USB3.2, 1\*8-bit DIO (opt.)
- 2.5"SATA Bay, 1\*mSATA, 1\*Line out, 2\*3W Speaker
- Optional 1\*PCIeX4(X4) or 1\*PCI
- DC 9~36V power input
- Standard VESA mount and panel mounting



## Product Overview

ALAD-K2350T(P) is a full flat mirror panel powered by an Intel® Tiger lake U series processor. It adopts 23.8 "1920\*1080 resolution full HD TFT LCD and fully fits surface projection multi-point capacitive touch screen. The product has a comprehensive I/O interface, supporting 1\*2.5 "SATA disk and 1\*mSATA dual storage; Built-in 1\*Mini PCIe and 1\*M.2 3042/3052 expansions, wide voltage DC power supply from 9 to 36V, aluminum die-cast body without fan heat dissipation, various installation modes, suitable for intelligent MES system and device management HMI.

## Product Parameters

System	
CPU	Intel® Tigerlake U Celeron/Core i3/i5/i7 CPU, ULT SoC, TDP 12W/15W
RAM	1*DDR4, 3200MHz SODIMM, 32GB max.
Graphics	Intel®UHD/ Intel® Iris® Xe Graphics: Intel DL boost, DirectX12.1, OpenGL 4.6 and OpenCL 3.0; HDMI:4096*2304@60Hz

I/O Port	
LAN	2*Intel I226V, 10M-1000M, WOL
USB	4*USB3.2
Display	1*HDMI
Audio	1*Line out, Realtek ALC897,2*3W Speaker
Serial port	2*RS232/422/485+2*RS232

LCD Display	
Dimension	23.8" TFT LCD
Resolution	1920*1080@60Hz
Max. colors	16.2M
Luminance (cd/m²)	350
Viewing Angle	89°(L), 89°(R), 89°(U),89°(D)

Touchscreen	
Touch type	projected capacitive touch screen
Transmittance	≥85%
Controller	USB

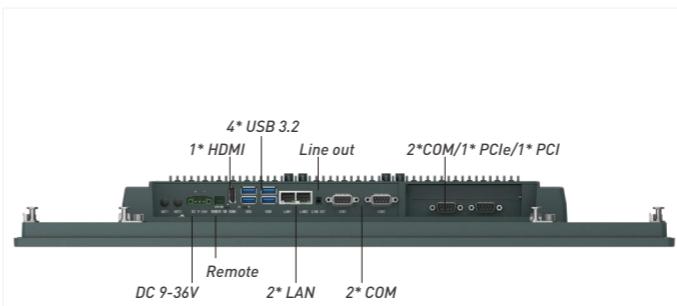
Storage	
Storage	1*2.5" SATA3.0 HDD/SSD, 1*mSATA

Expansion	
Expansion	1*Mini PCIe(PCle&USB),PCle/USB module; 1*M.2 B-Key 3042/3052(+SIM), 4G LTE/5G NR; Opt. 1*PCIeX4 (X4) or 1*32 bit PCI
Power Supply	
Input voltage & TDP	DC IN 9~36V; 11.52W (CPU i7-1165G7, 8G DDR4, 128G SSD)

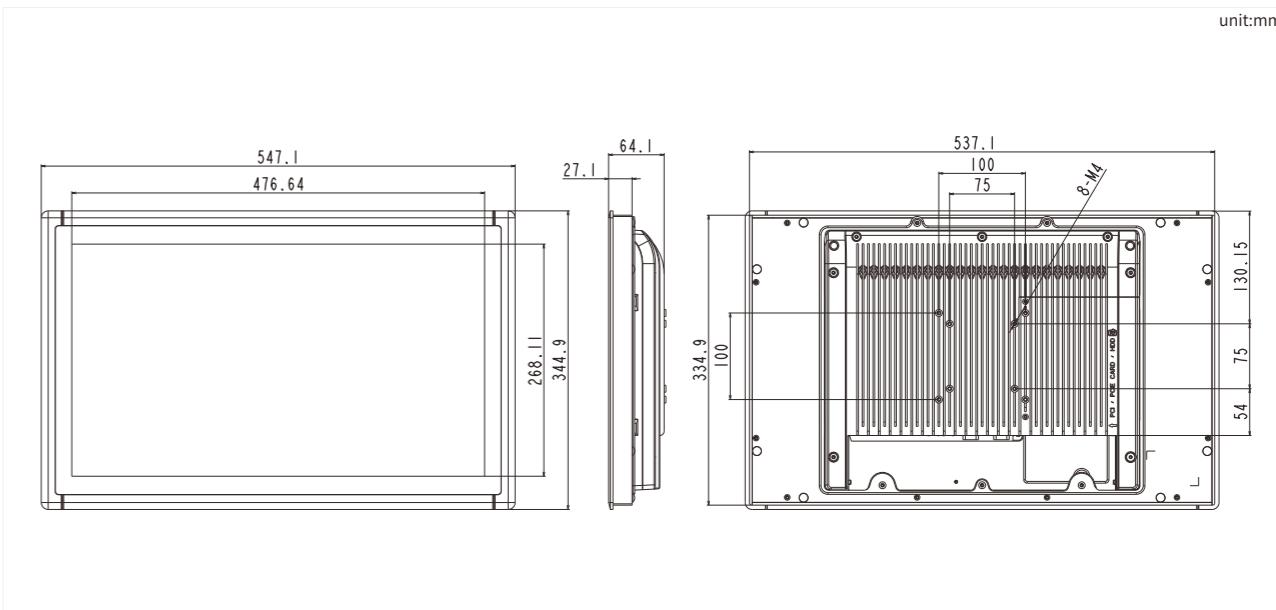
Mechanical	
Structure	Aluminum die-casting front bezel , fin-shaped radiator shell
Dimension (W*H*D)	594*375*64mm Panel mounting opening size(W*H): 583*364mm
Installation	Panel/VESA(100*100/75*75mm)
Net Weight	7.74KG

Environmental	
Operating Temp	0~50°C, HDD(-10~55°C, SSD),airflow
Storage Temp	-20°C~60°C
Storage Humidity	10~95%@40°C, non-condensing
Vibration	1g 5~500Hz,with HDD
Shock	10g peak acceleration(duration 11ms) with HDD
EMC	CE,FCC Class A
OS	Windows 11/10*IoT enterprise, Android,SUSE,Ubuntu,Wind River, Red Hat*Enterprise,Wind River VxWorks*7,Yocto

## I/O View



## Dimensions



## Ordering Information

Model	Processor	Touch Screen	Specifications
ALAD-K2150T(P)/S001	Intel® Core i3-1115G4		
ALAD-K2150T(P)/S002	Intel® Core i5-1135G7	T(P): Projected capacitive touch screen	23.8" TFT LCD, 4*COM, 4*USB3.2, 2*LAN, 1*HDMI, 1*Mini PCIe, 1*M.2 B-Key , 1*Line out, 1*2.5" SATA Bay, 1*mSATA, 2*3W Speaker, DC 9~36V
ALAD-K2150T(P)/S003	Intel® Core i7-1165G7		
ALAD-K2150T(P)/S004	Intel® Celeron 6305E		
ECX-168	1*PCIeX4 slot(X4 signal) (non COM3&4 in use)		
ECI-169	1*32-bit PCI slot (non COM3&4 in use)		
PA-60DC12	AC/DC power adapter, DC12V@5A ,60W		
PA-120DC19	AC/DC power adapter, DC19V@6.32A ,120W (when use POE network card for expansion)		

# WPPC-H1580T

Intel® Celeron J1900 CPU, 2\*GbE LAN, 2\*COM, 1\*USB3.0, 3\*USB2.0, 1\*HDMI, 1\*VGA, Stainless steel fanless design

## Key Specification

- Intel® Baytrail Celeron J1900 2.0-2.42G CPU
- 1-Ch DDR3L 1333MHZ SODIMM, Up to 8GB
- SUS304 Stainless steel case, 3.0mm 5052 Aluminum alloy back cover
- True-flat design, fanless design
- IP65/IP66 panel protection
- 15" LED TFT LCD, capacitive/Resistive touch screen
- 1\*HDMI, 1\*VGA, 2\*GbE LAN, 2\*COM, 1\*USB3.0, 3\*USB2.0
- 1\*Opt. ANT, support 4G LTE or WiFi/BT4.0
- 1\*Mini PCIe (PCIe+USB, w/SIM)
- 1\*Simple-swap 2.5" SATA bay, 1\*mSATA
- DC 9~36V wide power input



## Product Overview

WPPC-H1580T is a rugged and ultra-reliable fanless embedded waterproof panel PC. The front panel uses a SUS304 stainless steel shell, and the back cover uses a 3.0mm 5052 aluminum alloy design, which can not only meet the CPU heat dissipation, but also meet the VESA installation. It has the characteristics of super waterproof, sturdy and reliable, high performance, multiple IO, multiple expansion, and wide range of applications. It's suitable for wet, cold and harsh environments.

## Product Parameters

System	
CPU	Intel® Baytrail Celeron J1900 2.0-2.42G CPU
RAM	1*DDR3L, 1333Mhz SODIMM, Max.8GB
Graphics	Gen.7 Intel® HD Graphics, LCD+HDMI+VGA 3 displays, OpenGL 3.2, DirectX 11, OpenCL 1.2, MPGE2/H.264 VGA:1920*1200@60Hz; HDMI 1920*1080@60Hz

I/O Port	
LAN	2*Intel I211AT, Gigabit
USB	1*USB3.0, 3*USB2.0
Display	1*HDMI+1*VGA
Audio	optional audio
Serial port	2*RS232/422/485

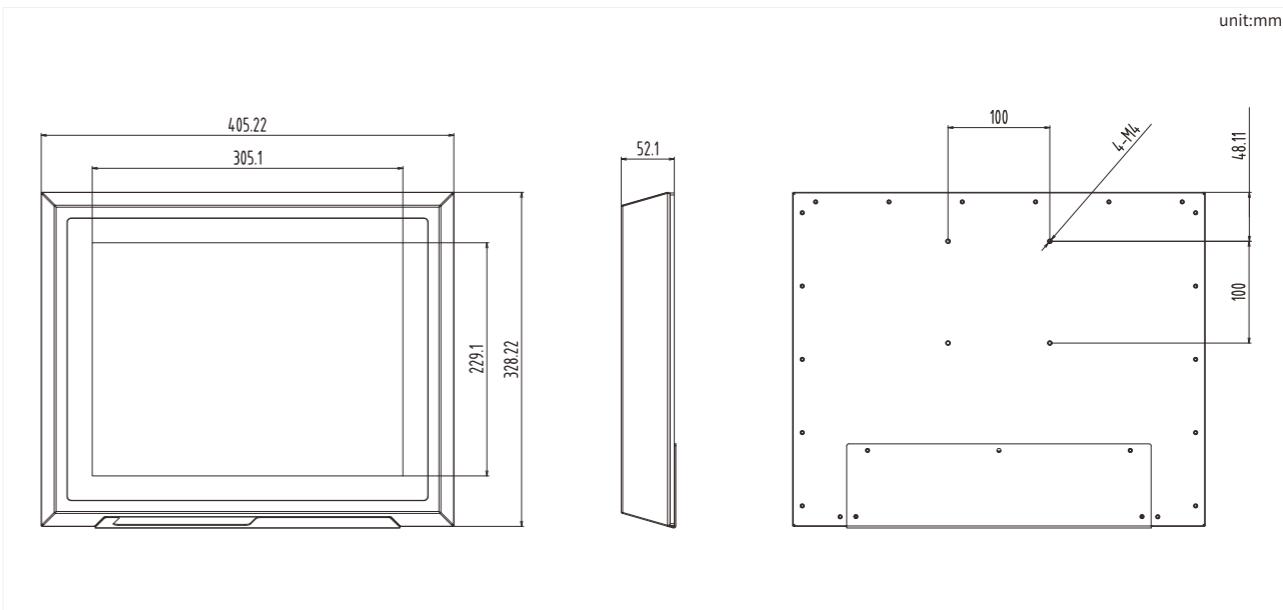
LCD Display	
Dimension	15" TFT LED
Resolution	1024*768
Max. colors	16.2M
Luminance (cd/m²)	350
Viewing Angle	80°(left), 80°(right), 80°(up), 80°(down)

Touchscreen	
Touch type	5-wire resistive touch screen/projected capacitive touch screen
Light Transmission	83/90%
Controller	USB/USB

## I/O View



## Dimensions



## Ordering Information

Model	Processor	Touch Screen	Specifications
WPPC-H1580T-T001	Intel® Baytrail Celeron J1900 CPU	5-wire resistive touch screen	15" TFT LCD, 1*HDMI, 1*VGA, 2*GbE LAN, 2*COM, 1*Opt. ANT, 1*USB3.0, 3*USB2.0, 1*Mini PCIe, 1*swappable 2.5"SATA bay, 1*mSATA, DC 9~36V
WPPC-H1580T(P)-T001		Projected capacitive touch screen	
PA-60DC12	AC/DC power adapter, DC12V/5A, 60W		

# WPPC-H1780T

Intel® Celeron J1900 CPU, 2\*GbE LAN, 2\*COM, 1\*USB3.0, 3\*USB2.0, 1\*HDMI, 1\*VGA, Stainless steel fanless design

## Key Specification

- Intel® Baytrail Celeron J1900 2.0-2.42G CPU
- 1-Ch DDR3L 1333MHZ SODIMM, Up to 8GB
- SUS304 Stainless steel case, 3.0mm 5052 Aluminum alloy back cover
- True-flat design, fanless design
- IP65/IP66 panel protection
- 17" LED TFT LCD, Capacitive/Resistive touch screen
- 1\*HDMI, 1\*VGA, 2\*GbE LAN, 2\*COM, 1\*USB3.0, 3\*USB2.0
- 1\*Opt. ANT, support 4G LTE or WiFi/BT4.0
- 1\*Mini PCIe (PCIe+USB, w/SIM)
- 1\*Simple-swap 2.5" SATA bay, 1\*mSATA
- DC 9~36V wide power input



## Product Overview

WPPC-H1780T is a rugged and ultra-reliable fanless embedded waterproof tablet PC. The front panel uses a SUS304 stainless steel shell, and the back cover uses a 3.0mm 5052 aluminum alloy design, which can not only meet the CPU heat dissipation, but also meet the VESA installation. It has the characteristics of advanced waterproof, sturdy and reliable, high performance, multiple IO, multiple expansion, and wide range of applications. It's suitable for wet, cold and harsh environments.

## Product Parameters

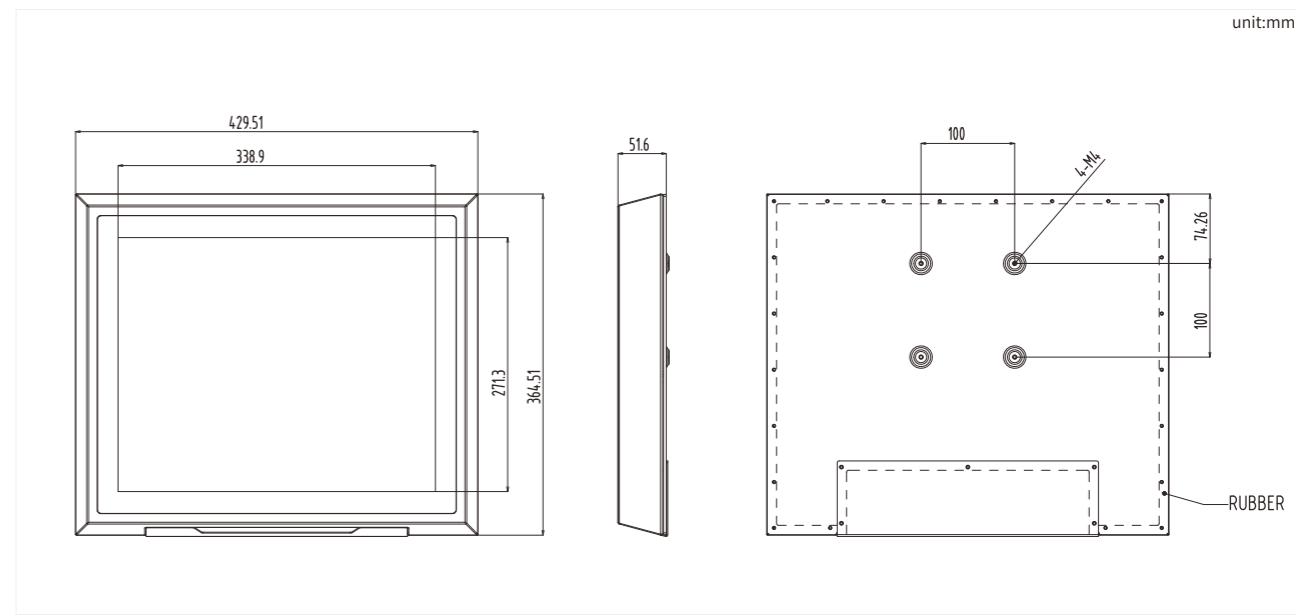
System	
CPU	Intel® Baytrail Celeron J1900 2.0-2.42G CPU
RAM	1*DDR3L,1333Mhz SODIMM Max. 8GB
Graphics	Gen.7 Intel® HD Graphics LCD+HDMI+VGA 3 displays, OpenGL 3.2, DirectX 11, OpenCL 1.2, MPGE2/H.264 VGA:1920*1200@60Hz; HDMI 1920*1080@60Hz
I/O Port	
LAN	2*Intel I211AT, Gigabit
USB	1*USB3.0, 3*USB2.0
Display	1*HDMI+1*VGA
Audio	optional audio
Serial port	2*RS232/422/485
LCD Display	
Display	17" TFT LED
Resolution	1280*1024
Max. colors	16.2M
Luminance(cd/m²)	600
Viewing Angle	80°(left), 80°(right), 70°(up), 80°(down)
Touchscreen	
Touch type	5-wire resistive touch screen/projected capacitive touch screen
Light Transmission	83/90%
Controller	USB/USB

Storage	
Storage	1*2.5" SATA (swappable) 1*mSATA Full-height card, support AHCI
Expansion	
Expansion Port	1*Mini PCIe, with SIM slot
Power Supply	
Power Supply & Power consumption	DC IN 9~36V, D-Jack w/M8, Power consumption: 30W
Mechanical	
Structure	SUS304 Stainless steel /5052 Aluminum alloy/SECC
Dimension (W*H*D)	429.51*364.51*52.1mm
Installation	Desktop mounting VESA(100*100mm)
Net Weight	5.57KG
Environmental	
Operating Temp	0~60°C
Storage Temp	-40°C~85°C
Storage Humidity	10~90%@40°C, No-condensation
Vibration	1g 5~500Hz
Shock	10g peak acceleration(duration 11ms) with HDD
EMC	CE,FCC Class A
OS	
Windows	7,Windows 8.1, Windows 10,Linux Fedora Ubuntu

## I/O View



## Dimensions



## Ordering Information

Model	Processor	Touch Screen	Specifications
WPPC-H1780T-T001	Intel® Baytrail Celeron J1900 CPU	5-wire resistive touch screen	17" TFT LCD, 1*HDMI, 1*VGA, 2*GbE LAN, 2*COM, 1*Opt. ANT, 1*USB3.0, 3*USB2.0, 1*Mini PCIe, 1*swappable 2.5" SATA bay, 1*mSATA, DC 9~36V
WPPC-H1780T(P)-T001		Projected capacitive touch screen	
PA-60DC12		AC/DC power adapter, DC12V/5A, 60W	



ALAD-101T	ALAD-151T	ALAD-171T	ALAD-181T(P)	ALAD-191T	ALAD-211T(P)
<b>LCD Display</b>					
Dimension	10.1" TFT LED	15" TFT LED	17" TFT LED	18.5" TFT LED	19" TFT LED
Resolution	1280*800	1024*768	1280*1024	1366*768	1280*1024
Max. colors	16.7M	16.2M	16.2M	16.7M	16.7M
Max. Luminance	350	350	600	300	470
Viewing Angle	85°(left), 85°(right), 85°(up), 85°(down)	80°(left), 80°(right), 80°(up), 80°(down)	80°(left), 80°(right), 70°(up), 80°(down)	89°(left), 89°(right), 85°(up), 85°(down)	85°(left), 85°(right), 75°(up), 85°(down)
Backlight life	15000 hours/50000 hours	50000 hours	70000 hours	50000 hours	50000 hours
<b>Touch screen</b>					
Touch type	5-wire resistive touch screen/projected capacitive touch screen	5-wire resistive touch screen/projected capacitive touch screen	5-wire resistive touch screen/projected capacitive touch screen	Projected capacitive touch screen	5-wire resistive touch screen/projected capacitive touch screen
Light Transmission	80%/90%	83%/90%	80%/90%	90%	83%/90%
Controller	USB/USB	USB/USB,RS232	USB/USB	USB/RS232	USB/USB
<b>I/O Port</b>					
OSD menu/language	AUTO/Power/Menu/Source/UP (LEFT)/DOWN(RIGHT) Chinese, English, German, French, Russian, Italian, Spanish, Arabic and other optional languages	AUTO/Power/Menu/Source/UP (LEFT)/DOWN(RIGHT) Chinese, English, German, French, Russian, Italian, Spanish, Arabic and other optional languages	AUTO/Power/Menu/Source/UP (LEFT)/DOWN(RIGHT) Chinese, English, German, French, Russian, Italian, Spanish, Arabic and other optional languages	AUTO/Power/Menu/Source/UP (LEFT)/DOWN(RIGHT) Chinese, English, German, French, Russian, Italian, Spanish, Arabic and other optional languages	AUTO/Power/Menu/Source/UP (LEFT)/DOWN(RIGHT) Chinese, English, German, French, Russian, Italian, Spanish, Arabic and other optional languages
Display	1*VGA+1*HDMI/1*DP (choose one)				
Audio	1*Line in, 2*2W power speaker	1*Line in, 2*3W power speaker			
Touch interface	1*RS232 Touch, 1*USB Touch				
<b>Power</b>					
Power Input	DC 10-30V				
Power consumption	12V@0.65A (No Power output)	12V@0.65A (No Power output)	12V@1.6A (No Power output)	12V@1.6A (No Power output)	12V@1.6A (No Power output)
Standby power consumption	Standby power consumption <1W				
<b>Mechanical</b>					
Structure	Aluminum alloy die-casting, flat panel, cooling fin case	Aluminum alloy die-casting, flat panel, cooling fin case	Aluminum alloy die-casting, flat panel, cooling fin case	Aluminum alloy die-casting, flat panel, cooling fin case	Aluminum alloy die-casting, flat panel, cooling fin case
Dimension (W*H*D)	275*193*51mm Panel mounting opening size(W*H): 271*189mm	380*315*56mm Panel mounting opening size(W*H): 367.3*303.3mm	415.5*360.5*59mm Panel mounting opening size (W*H): 407*352mm	482.3*304.3*59.1mm Panel mounting opening size (W*H): 473.8*295.8mm	453.5*388.5*64.1mm Panel mounting opening size (W*H): 445*380mm
Net Weight	1.8kg	4.3kg	TBD	6.6kg	TBD
Installation	Panel mounting, VESA (75*75mm)	Panel mounting, VESA (100*100/75*75mm)	Panel mounting, VESA (100*100mm)	Panel mounting, VESA (100*100/75*75mm)	Panel mounting, VESA (100*100/75*75mm)
<b>Environmental</b>					
Operating Temp	-20~70°C, with air flow	0~50°C, with air flow	0~50°C, with air flow	0~50°C, with air flow	0~50°C, with air flow
Storage Temp	-40~80°C	-20~60°C	-20~60°C	-40~80°C	-20~60°C
Humidity	10~95%@40°C, No-condensation				
Vibration	1g 5~500Hz				
Shock	10g peak acceleration(duration 11ms)				
Certificate	CE,FCC Class A				

# ALAD-101T

10.1" TFT LCD, Capacitive/Resistive touch screen, HDMI/DP (choose one), VGA display, OSD function keys

## Key Specification

- Aluminum alloy die-casting, naturally streamlined design
- 10.1" high resolution TFT LCD (LED Backlight)
- 5 wire heat-resistant resistive touch screen
- Optional projected capacitive touch screen, support multi-touch
- HDMI/DP(choose one) and VG signal input
- Audio input, support 2\*2W power speaker
- DC 10-30V power input
- True-flat panel, IP65 front panel



## I/O View



## Product Overview

ALAD-101T is an industrial touch display that supports 10.1" TFT LED LCD screen, high resolution 1280\*800, USB and serial port dual-signal 5-wire resistive touch screen and optional capacitive touch screen. HDMI/DP (choose one). Variety of installation methods for application sites in different fields such as vehicle display, industrial automation, medical treatment, and new energy.

## Product Parameters

Display Screen	
Dimension	10.1" TFT LED
Resolution	1280*800
Max. colors	16.7M
Max. Luminance	350
Viewing Angle	85°(left), 85°(right), 85°(up), 85°(down)
Backlight life	15000 hours/50000 hours

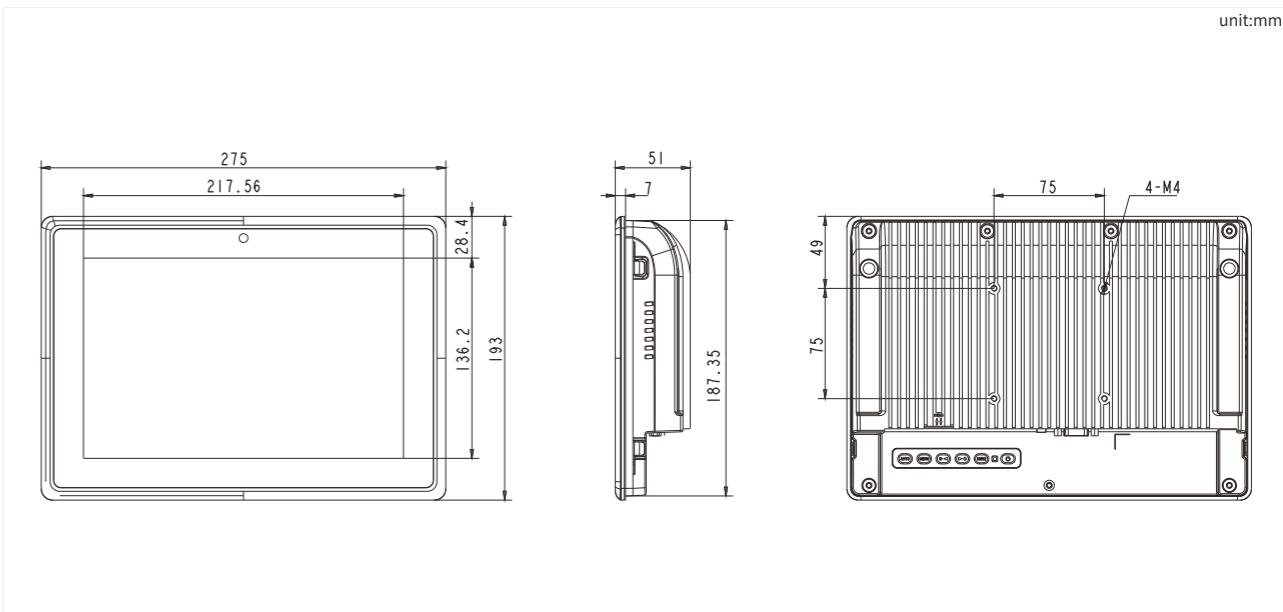
Touch Screen	
Type	5-wire resistive touch screen/projected capacitive touch screen
Light Transmission	80%/90%
Controller	USB/USB

I/O Port	
OSD menu/language	AUTO/Power/Menu/Source/UP (LEFT)/DOWN (RIGHT) Chinese, English, German, French, Russian, Italian, Spanish, Arabic and other optional languages
Display	1*VGA+1*HDMI/1*DP (choose one)
Audio	1*Line in, 2*2W power speaker
Touch interface	1*RS232 Touch, 1*USB Touch

Power	
Power input	DC 10-30V
Power consumption	12V@0.65A (No Power output)
Standby power consumption	Standby power consumption <1W
Mechanical	
Structure	Aluminum alloy die-casting, flat panel, cooling fin case
Dimension (W*H*D)	275*193*51mm Panel mounting opening size(W*H): 271*189mm
Net Weight	1.8kg
Installation	Panel mounting, VESA (75*75mm)

Environmental	
Operating Temp	-20~70°C, with air flow
Storage Temp	-40~80°C
Humidity	10~95%@40°C, No condensation
Vibration	1g 5~500Hz
Shock	10g peak acceleration(duration 11ms) with HDD
Certificate	CE,FCC Class A

## Dimensions



## Ordering Information

Model	Touch Screen	Specifications
ALAD-101T/S001-G	5-wire resistive touch screen	10.1" TFT LCD, 1*HDMI (default)/1*DP(optional), 1*VGA, 1*Line in, 2*2W power speaker, DC 10-30V power supply
ALAD-101T (P)/S001-G	Projected capacitive touch screen	
PA-60DC12		AC/DC power adapter, DC12V/5A, 60W

# ALAD-151T

15" TFT LCD, Capacitive/Resistive touch screen, HDMI/DP (choose one), VGA display, OSD function keys

## Key Specification

- Aluminum alloy die-casting, naturally streamlined design
- 15" high resolution TFT LCD (LED Backlight)
- 5 wire heat-resistant resistive touch screen
- Optional projected capacitive touch screen, support multi-touch
- HDMI/DP (choose one) and VGA signal input
- Audio input, optional support 2.3W power speakers
- DC 10-30V power input
- Flat panel, IP65 front panel



## Product Overview

ALAD-151-G is an industrial touch display that supports 15" TFT LED LCD screen, high resolution 1280\*800, USB and serial port dual-signal 5-wire resistive touch screen and optional capacitive touch screen. HDMI/DP (choose one). It is an industrial-standard multimedia display, with multiple installations suitable for different application sites.

## Product Parameters

### Display Screen

Dimension	15" TFT LED
Resolution	1024*768
Max. colors	16.2M
Max. Luminance	350
Viewing angle	80°(left), 80°(right), 80°(up), 80°(down)
Backlight life	50000 hours

### Touch Screen

Type	5-wire resistive touch screen/projected capacitive touch screen
Light Transmission	83%/90%
Controller	USB/USB,RS232

### I/O Port

OSD menu/language	AUTO/Power/Menu/Source/UP (LEFT)/DOWN (RIGHT) Chinese, English, German, French, Russian, Italian, Spanish, Arabic and other optional languages
Display	1*VGA+1*HDMI/1*DP (choose one)
Audio	1*Line in, 2*3W power speaker
Touch interface	1*RS232 Touch, 1*USB Touch

### Power

Power input	DC 10-30V
Power consumption	12V@0.65A (No power output)
Standby power consumption	Standby power consumption <1W

### Mechanical

Structure	Aluminum alloy die-casting, flat panel, cooling fin case
Dimension(w*h*d)	380*315*56mm Panel mounting opening size (W*H): 367.3*303.3mm
Net weight	4.3kg
Installation	Panel mounting, VESA (100*100/75*75mm)

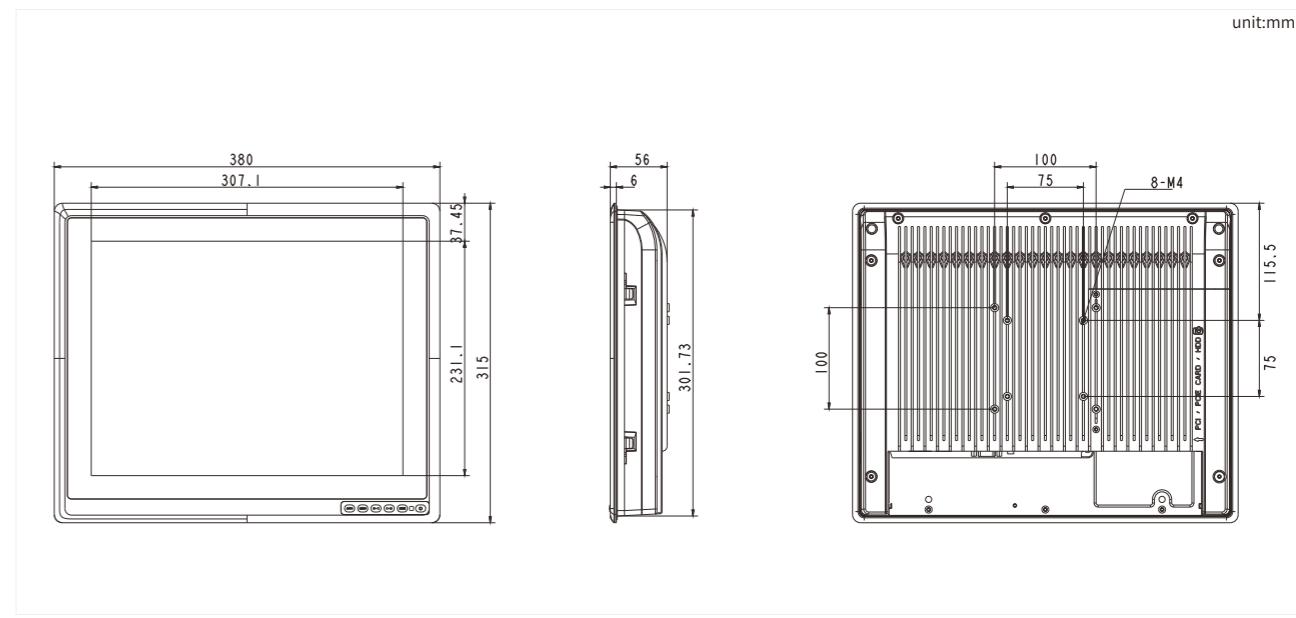
### Environmental

Operating Temp	0~50°C, with air flow
Storage Temp	-20~60°C
Storage Humidity	10~95%@40°C, No-condensation
Vibration	1g 5~500Hz
Shock	10g peak acceleration(duration 11ms) with HDD
Certificate	CE,FCC Class A

## I/O View



## Dimensions



## Ordering Information

Model	Touch Screen	Specifications
ALAD-151T/S001-G	5-wire resistive touch screen	15" TFT LCD, 1*HDMI (default)/1*DP(optional), 1*VGA, 1*Line in, 2*3W power speaker, DC 10-30V power supply
ALAD-151T (P)/S001-G	Projected capacitive touch screen	
PA-60DC12		AC/DC power adapter, DC12V/5A, 60W

# ALAD-171T

17" TFT LCD, Capacitive/Resistive touch screen, HDMI/DP (choose one), VGA display, OSD function keys

## Key Specification

- Aluminum alloy die-casting, naturally streamlined design
- 17" high resolution TFT LCD (LED Backlight)
- 5 wire heat-resistant resistive touch screen
- Optional projected capacitive touch screen, support multi-touch
- HDMI/DP (choose one) and VGA signal input
- Audio input, optional support 2.3W power speakers
- DC 10-30V power input
- Flat panel, IP65 front panel



## Product Overview

ALAD-171T-G is an industrial touch display that supports 17" TFT LED LCD screen, high resolution 1280\*1024, USB and serial port dual-signal 5-wire resistive touch screen and optional capacitive touch screen. HDMI/DP (choose one). It is an industrial-standard multimedia display, with multiple installations suitable for different application sites.

## Product Parameters

Display Screen	
Dimension	17" TFT LED
Resolution	1280*1024
Max. colors	16.2M
Max. Luminance	600
Viewing angle	80°(left), 80°(right), 70°(up), 80°(down)
Backlight life	70000 hours

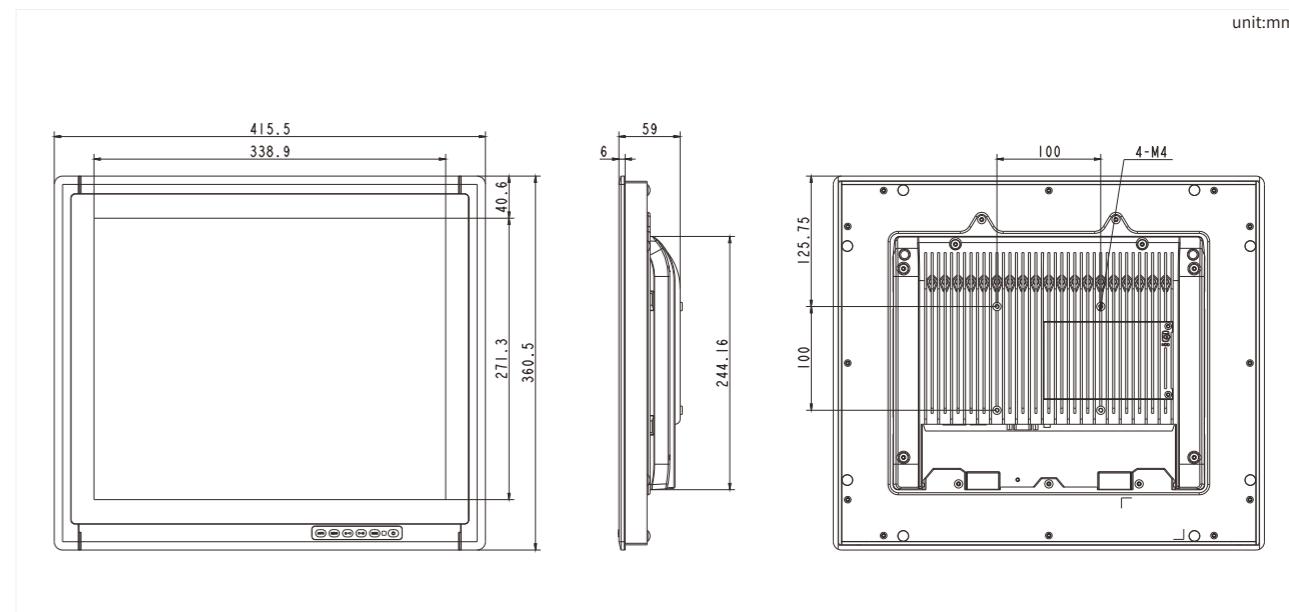
Touch Screen	
Type	5-wire resistive touch screen/projected capacitive touch screen
Light Transmission	80%/90%
Controller	USB/USB

I/O Port	
OSD menu /language	AUTO/Power/Menu/Source/UP (LEFT)/DOWN(RIGHT) Chinese, English, German, French, Russian, Italian, Spanish, Arabic and other optional languages
Display	1*VGA+1*HDMI/1*DP (choose one)
Audio	1*Line in, 2*3W power speaker
Touch interface	1*RS232 Touch, 1*USB Touch

## I/O View



## Dimensions



## Ordering Information

Model	Touch Screen	Specifications
ALAD-171T/S001-G	5-wire resistive touch screen	17" TFT LCD, 1*HDMI (default)/1*DP(optional), 1*VGA, 1*Line in, 2*3W power speaker, DC 10-30V power supply
ALAD-171T (P)/S001-G	Projected capacitive touch screen	
PA-60DC12	AC/DC power adapter, DC12V/5A, 60W	

# ALAD-181T(P)

18.5" TFT LCD, Capacitive touch screen , HDMI/DP (choose one), VGA dual signals, OSD function keys

## Key Specification

- Aluminum alloy die-casting, naturally streamlined design
- 18.5" high resolution TFT LCD (LED Backlight)
- Projected capacitive touch screen, support multi-touch
- HDMI/DP (choose one) and VGA signal input
- Audio input, optional support 2.3W power speakers
- DC 10-30V power input
- IP65 certified full-flat panel protection



## Product Overview

ALAD-181T-G is an industrial touch display that supports 18.5" TFT LED LCD screen, high resolution 1366\*768, USB and serial port dual-signal capacitive touch screen. HDMI/DP (choose one). It is an industrial-standard multimedia display, with multiple installations suitable for different application sites.

## Product Parameters

Display Screen	
Dimension	18.5" TFT LED
Resolution	1366*768
Max. colors	16.7M
Max. Luminance	300
View angle	89°(left), 89°(right), 85°(up), 85°(down)
Backlight life	50000 hours

Touch Screen	
Type	Projected capacitive touch screen
Light Transmission	90%
Controller	USB/RS232

I/O Port	
OSD menu/language	AUTO/Power/Menu/Source/UP(LEFT)/DOWN(RIGHT) Chinese, English, German, French, Russian, Italian, Spanish, Arabic and other optional languages
Display	1*VGA+1*HDMI/1*DP (choose one)
Audio	1*Line in, 2*3 power speaker
Touch interface	1*RS232 Touch, 1*USB Touch

Power	
Power input	DC 10-30V
Power consumption	12V@1.6A (No power output)
Standby power consumption	Standby power consumption <1W

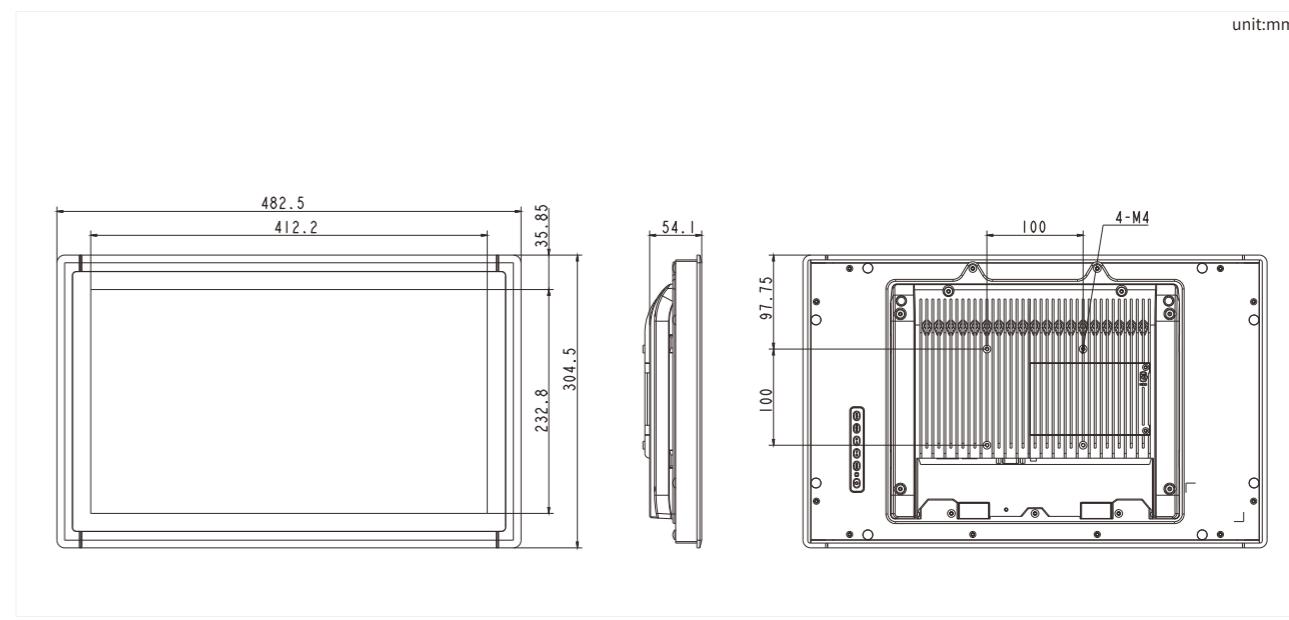
Mechanical	
Structure	Aluminum alloy die-casting, flat panel, cooling fin case
Dimension (W*H*D)	482.3*304.3*59.1mm
	Panel mounting opening size (W*H): 473.8*295.8mm
Net weight	6.6kg
Installation	Panel mounting, VESA (100*100/75*75mm)

Environmental	
Operating Temp	0~50°C, with air flow
Storage Temp	-20~60°C
Humidity	10~95%@40°C, No condensation
Vibration	1g 5~50Hz
Shock	10g peak acceleration(duration 11ms) with HDD
Certificate	CE,FCC Class A

## I/O View



## Dimensions



## Ordering Information

Model	Touch Screen	Specifications
ALAD-181T (P)/S001-G	Projected capacitive touch screen	18.5" TFT LCD, 1*HDMI (default)/1*DP(optional), 1*VGA, 1*Line in, 2*3W power speaker, DC 10-30V power supply
PA-60DC12	AC/DC adapter, DC12V/5A, 60W	

# ALAD-191T

19" TFT LCD, Capacitive/Resistive touch screen, HDMI/DP (choose one), VGA dual signals, OSD function keys

## Key Specification

- Aluminum alloy die-casting, naturally streamlined design
- 19" high resolution TFT LCD (LED Backlight)
- 5 wire heat-resistant resistive touch screen
- Optional projected capacitive touch screen, support multi-touch
- HDMI/DP (choose one) and VGA signal input
- Audio input, optional support 2.3W power speakers
- DC 10-30V power input
- Flat panel, IP65 front panel



## Product Overview

ALAD-191T-G is an industrial touch display that supports 19" TFT LED LCD screen, high resolution 1280\*1024, USB and serial port dual-signal 5-wire resistive touch screen and optional capacitive touch screen. HDMI/DP (choose one). It is an industrial-standard multimedia display, with multiple installations suitable for different application sites.

## Product Parameters

Display Screen	
Dimension	19" TFT LED
Resolution	1280*1024
Max. colors	16.7M
Max. Luminance	470
View angle	85°(left), 85°(right), 75°(up), 85°(down)
Backlight life	50000 hours

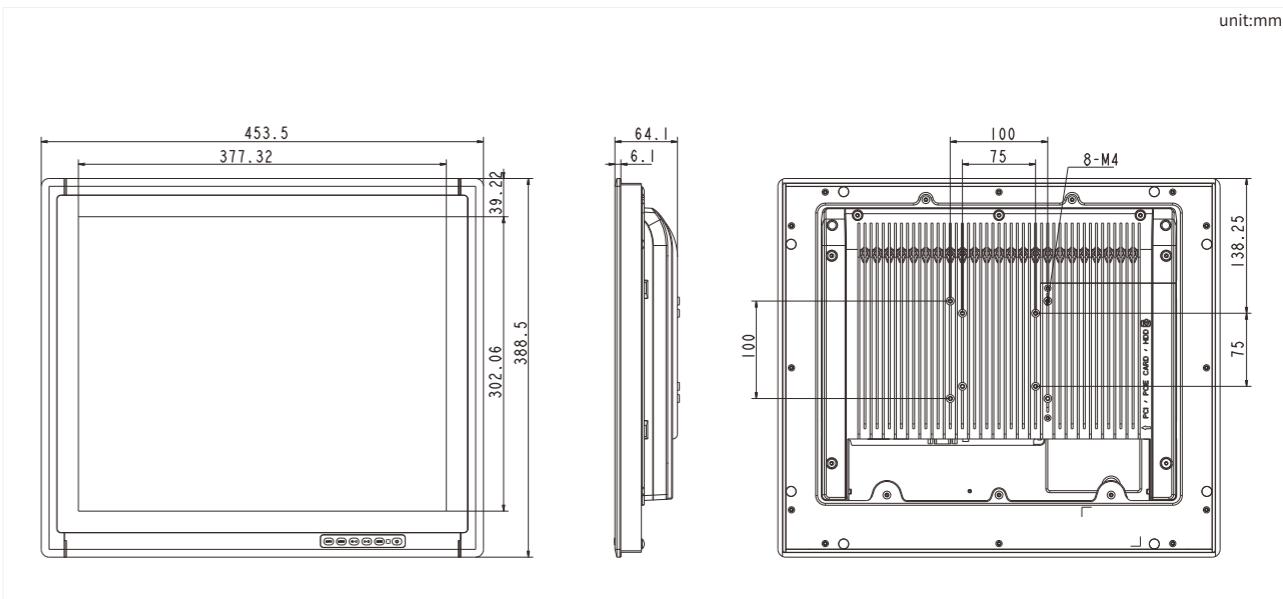
Touch Screen	
Type	5-wire resistive touch screen/projected capacitive touch screen
Light Transmission	83%/90%
Controller	USB/USB

I/O Port	
OSD menu/language	AUTO/Power/Menu/Source/UP (LEFT)/DOWN(RIGHT) Chinese, English, German, French, Russian, Italian, Spanish, Arabic and other optional languages
Display	1*VGA+1*HDMI/1*DP (choose one)
Audio	1*Line in, 2*3W power speaker
Touch interface	1*RS232 Touch, 1*USB Touch

## I/O View



## Dimensions



## Ordering Information

Model	Touch Screen	Specifications
ALAD-191T/S001-G	5-wire resistive touch screen	19" TFT LCD, 1*HDMI (default)/1*DP(optional), 1*VGA, 1*Line in, 2*3W power speaker, DC 10-30V power supply
ALAD-191T (P) /S001-G	Projected capacitive touch screen	
PA-60DC12		AC/DC power adapter, DC12V/5A, 60W

# ALAD-211T(P)

21.5" TFT LCD, Capacitive touch screen, HDMI/DP (choose one), VGA dual signals, OSD function keys

## Key Specification

- Aluminum alloy die-casting, naturally streamlined design
- 21.5" high resolution TFT LCD (LED Backlight)
- Projected capacitive touch screen, support multi-touch
- HDMI/DP (choose one) and VGA signal input
- Audio input, optional support 2.3W power speakers
- DC 10-30V power input
- Flat panel, IP65 front panel



## Product Overview

ALAD-211T-G is an industrial touch display that supports 21.5" TFT LED LCD screen, high resolution 1920\*1080, USB and serial port dual-signal capacitive touch screen. HDMI/DP (choose one). It is an industrial-standard multimedia display, with multiple installations suitable for different application sites.

## Product Parameters

### Display Screen

Dimension	21.5" TFT LED
Resolution	1920*1080
Max. colors	16.7M
Max. Luminance	300
View angle	89°(left), 89°(right), 89°(up), 89°(down)
Backlight life	50000 hours

### Touch Screen

Type	Projected capacitive touch screen
Light Transmission	90%
Controller	USB/RS232

### I/O Port

OSD menu/language	AUTO/Power/Menu/Source/UP(LEFT)/DOWN(RIGHT) Chinese, English, German, French, Russian, Italian, Spanish, Arabic and other optional languages
Display	1*VGA+1*HDMI/1*DP (choose one)
Audio	1*Line in, 2*3W power speaker
Touch interface	1*RS232 Touch, 1*USB Touch

### Power

Power input	DC 10-30V
Power consumption	12V@1.6A (No power output)
Standby power consumption	Standby power consumption <1W

### Mechanical

Structure	Aluminum alloy die-casting, flat panel, cooling fin case
Dimension (W*H*D)	546.9*344.7*64.1mm
Panel mounting opening size (W*H)	537.5*335.3mm
Net weight	8.1kg
Installation	Panel mounting, VESA (100*100/75*75mm)

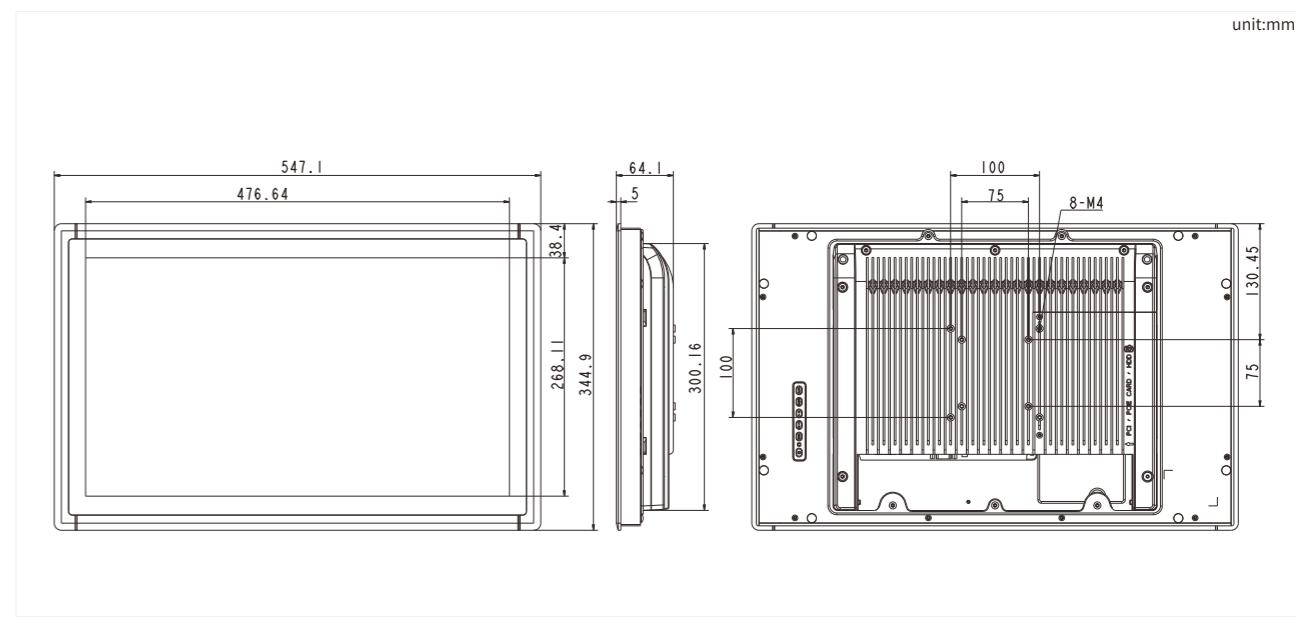
### Environmental

Operating Temp	0~50°C, with air flow
Storage Temp	-20~60°C
Humidity	10~95%@40°C, No condensation
Vibration	1g 5~500Hz
Shock	10g peak acceleration(duration 11ms)
Certificate	CE,FCC Class A

## I/O View



## Dimensions



## Ordering Information

Model	Touch Screen	Specifications
ALAD-211T (P)/S001-G	Projected capacitive touch screen	21.5" TFT LCD, 1*HDMI (default) / 1*DP (optional), 1*VGA, 1*Line in, 2*3W power speaker, DC 10-30V power supply
PA-60DC12	AC/DC power adapter, DC12V/5A, 60W	