

Product Specifications

Customer	
Model Name	NTWP238-1 V612E
Model Number	NTWP238<u>XXSXX</u>-SI97<u>XXX</u>-<u>XXXX</u>-612E

* X = A~Z, 0~9 (Depends on Options.)



Records of Revision			
Vision	Modifying	Old Description	New Description
v2512.1	Preliminary Specification		

Features

- ★ 23.8 inch, 1920x1080 (FHD) Resolution
- ★ Wide Viewing Angle Technology , 178°/178°
- ★ Intel® Alder Lake N97 CPU
- ★ DDR4 8G RAM, Max to 16G
- ★ GbE LAN Port x2
- ★ 128G SSD, Max to 1T
- ★ HDMI Output x1, DP output x1
- ★ Realtek Audio HAD Codec,
- ★ RS485 Port x1, RS232 Port x6
- ★ USB 3.0 x4, USB 2.0 x2
- ★ Narrow Bezel, True Flat Projected Capacitive Touch Screen
- ★ 7H Hardness Tempered Cover Glass
- ★ 10 points Multi-touch, Supports NEXTECH Dedicated Stylus
- ★ Metal Cabinet with Diverse Combine Options
- ★ Made in Taiwan, 3 Years Warranty
- ★ Optional High Brightness 1500nits, for Outdoor Environment
- ★ Optional Anti-Glare&UV/Antibacterial/Privacy Filter Surface Treatment



PSE



BSMI



RoHS



CE



ISO9001



FCC



Desktop Stand



Wall Mounting



Open-frame Brackets



Panel Mount

System Specifications

CPU	Intel® Alder Lake-N97 Processor
Memory	DDR4 SO-DIMM 8G, Max to 16G
Network	Intel i210-AT GbE Ethernet Controller x1 Intel i226-V GbE Ethernet Controller x1
Storage	M.2 M-Key 2280, PCIE X1/SATA, Support PCIE X1 NVMe/SATA SSD, Auto Detect SATA3.0 6Gbps
Sound Chip	Realtek Audio HAD Codec
Rear I/O	HDMI x1, DP x1 RJ45 LAN Ports x2 USB 3.0 x4, USB 2.0 x2 RS485 x1, RS232 x6 Line-Out + MIC 2in1 3.5mm Jack x1
Operating Temp.	0~60°C
Storage Temp.	-20~75°C
Power Input	12VDC-in

Display Specifications

Screen Diagonal	23.8 inch	Display Mode	Normally Black
Display Area	527.04x296.46 mm	Backlight Unit	LED (white LED)
Resolution	1920x1080 (FHD)	Viewing Angle (L/R, U/D)	178°/178° (CR=10)
Contrast Ratio	3000:1	Response Time	16 msec.
Display Ratio	16:9	Backlight Lifetime	>30,000 Hours
Support Colors	16.7M Colors	Operating Temp.	0~50°C
Pixel Pitch	274.5x274.5 um	Storage Temp.	-20~60°C

Display Options

Brightness			
	Brightness	Environment	Model Name
Standard	250nits	General	NTWP238NXSXX-SI97XXX-XXXX-612E
Option 1	1000nits	Outdoor Environment	NTWP238AXSXX-SI97XXX-XXFX-612E
Option 2	1500nits	Sunlight Readable	NTWP238FX2XX-SI97XXX-XXFX-612E *

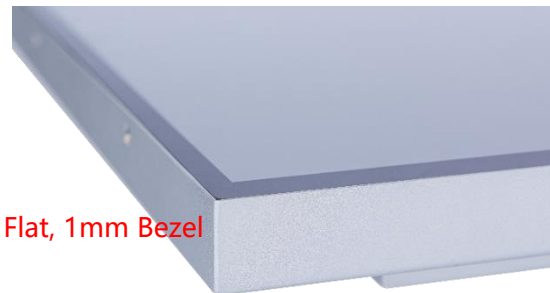
* Check the data sheet NTWP238-2 V612E

Touch Options

Touch Screen		
	Description	Model Name
Standard	Projected Capacitive Touch	NTWP238XPSXX-SI97XXX-XXXX-612E
Option	Non-Touch	NTWP238X0SXX-SI97XXX-XXXX-612E

Projected Capacitive Touch

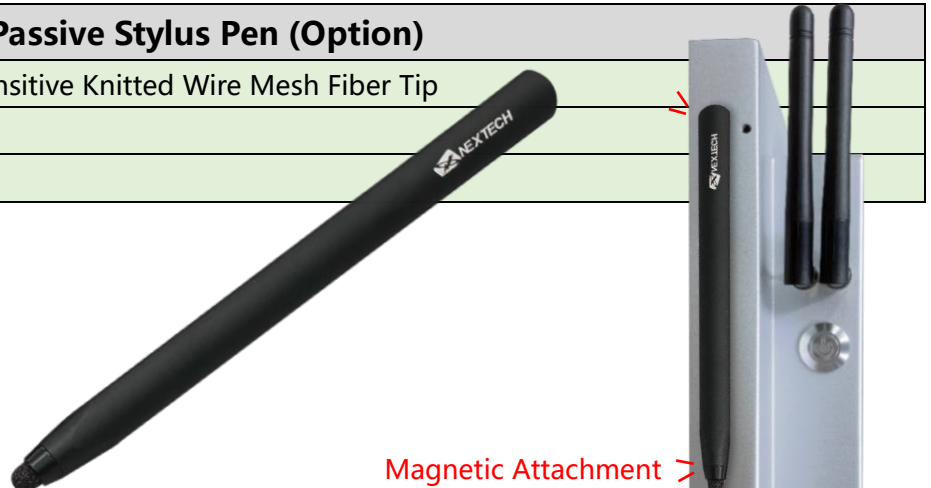
Touch Technology	Projected Capacitive	Thickness of Cover Lens	2.9±0.2mm
Allowed Touch Points	10 points	Hardness of Cover Lens	7H
Transparency	≥87%	IK Ratings	IK07
Accuracy	99.00%		



* True Flat, 1mm Bezel

Surface Treatment		
	Description	Model Name
Standard	(none)	NTWP238XXS00-SI97XXX-XXXX-612E
Option 1	Anti-Glare&UV Coating	NTWP238XXSGG-SI97XXX-XXXX-612E
Option 2	Antibacterial (AB Film)	NTWP238XXSAB-SI97XXX-XXXX-612E
Option 3	Anti-Spy (AS Film)	NTWP238XXSFF-SI97XXX-XXXX-612E

Passive Stylus Pen (Option)	
Technology	Passive High Sensitive Knitted Wire Mesh Fiber Tip
Size of tip	6mm
Magnetic Attachment	Yes



Magnetic Attachment >

System Options

Memory		
	Item	Model Name
Standard	DDR4 SO-DIMM 8G	NTWP238XXSXX-SI97<u>8XX</u>-XXXX-612E
Option 1	DDR4 SO-DIMM 16G	NTWP238XXSXX-SI97 <u>A</u> XX-XXXX-612E
Option 2	DDR4 SO-DIMM 32G	NTWP238XXSXX-SI97 <u>B</u> XX-XXXX-612E
Option 3	DDR4 SO-DIMM 64G	NTWP238XXSXX-SI97 <u>C</u> XX-XXXX-612E

Storage		
	Item	Model Name
Standard	SSD 128G	NTWP238XXSXX-SI<u>XXXX</u><u>S1</u>-XXXX-612E
Option 1	SSD 256G	NTWP238XXSXX-SI97X <u>S2</u> -XXXX-612E
Option 2	SSD 512G	NTWP238XXSXX-SI97X <u>S3</u> -XXXX-612E
Option 3	SSD 1T	NTWP238XXSXX-SI97X <u>H1</u> -XXXX-612E
Option 4	SSD 128G + SATA HDD 1T	NTWP238XXSXX-SI97X <u>SH</u> -XXXX-612E

System Options (Continued)

Material of Cabinet		
	Description	Model Name
Standard	SECC	NTWP238XXSXX-SI97XXX-<u>SXXX</u>-612E
Option 1	Stainless Steel	NTWP238XXSXX-SI97XXX- <u>LXXX</u> -612E
Option 2	Aluminum	NTWP238XXSXX-SI97XXX- <u>AXXX</u> -612E

Color of Cabinet		
	Description	Model Name
Standard	Silver	NTWP238XXSXX-SI97XXX-<u>SIXXXX</u>-<u>XSXX</u>-612E
Option 1	White	NTWP238XXSXX-SI97XXX- <u>XWXX</u> -612E
Option 2	Black	NTWP238XXSXX-SI97XXX- <u>XBXX</u> -612E
Options	Other Colors	NTWP238XXSXX-SI97XXX- <u>XXXX</u> -612E

* X = A~Z, 0~9 (Depends on Color)

Cooling Fan		
	Description	Model Name
Standard	Fanless	NTWP238XXSXX-SI97XXX-<u>XX0X</u>-612E
Option	7 Blades/4000r.p.m/28.3dB	NTWP238XXSXX-SI97XXX- <u>XXFX</u> -612E

Power Input		
	Description	Model Name
Standard	9~24DC-in, with AC/DC Adapter	NTWP238XXSXX-SI97XXX-<u>XXX2</u>-612E
Option	100~240V AC, C14 AC Power Socket	NTWP238XXSXX-SI97XXX- <u>XXXA</u> -612E

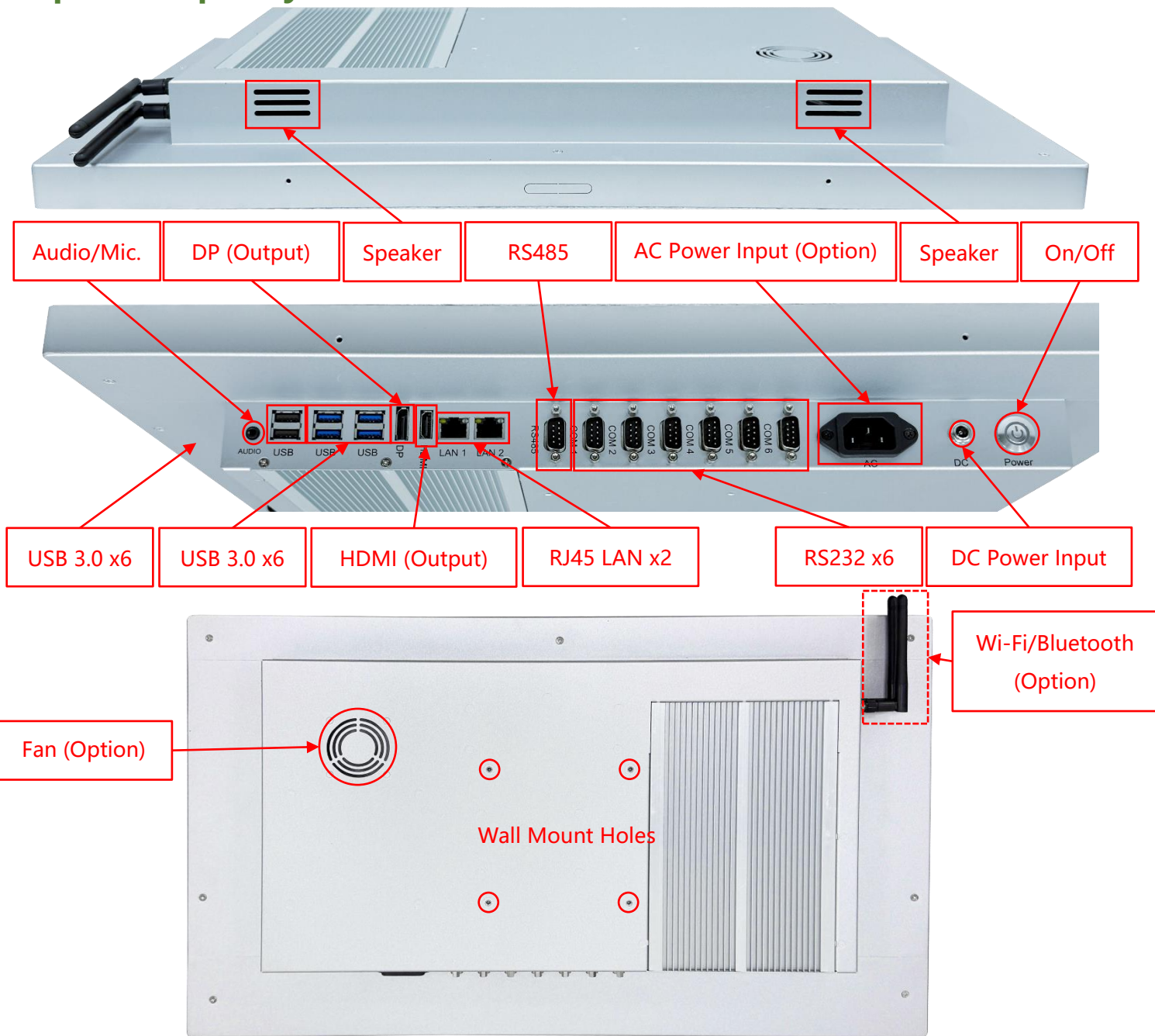


DC-in



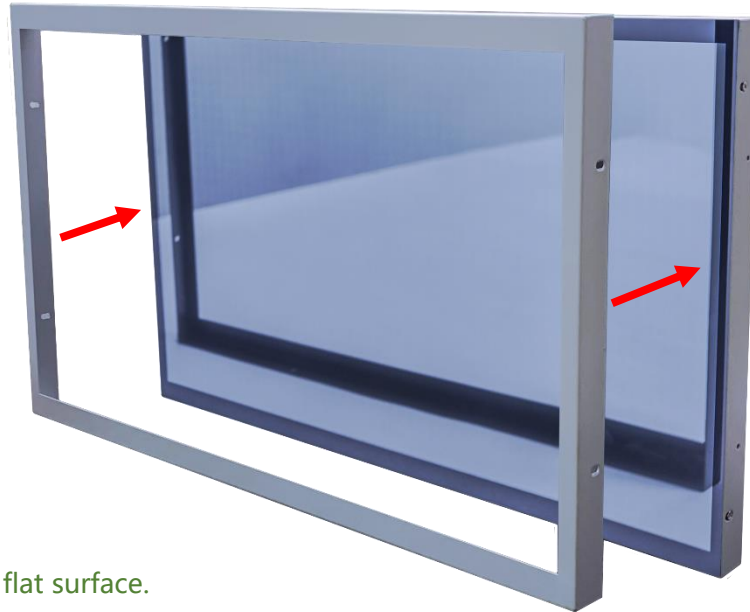
AC-in

Input /Output System



Input / Output	Connectors	Input / Output	Connectors
HDMI (Output)	1	Analog Audio Out/Mic. in	1
DP (Output)	1	Speakers	2W x2
USB	USB 3.0x4, USB 2.0x2	DC Power Input	1
RS485	1	AC Power Input	Option
RS232	6	Wi-Fi/Bluetooth & Antenna	Option
LAN (RJ45)	2		

Front Cover (Option)



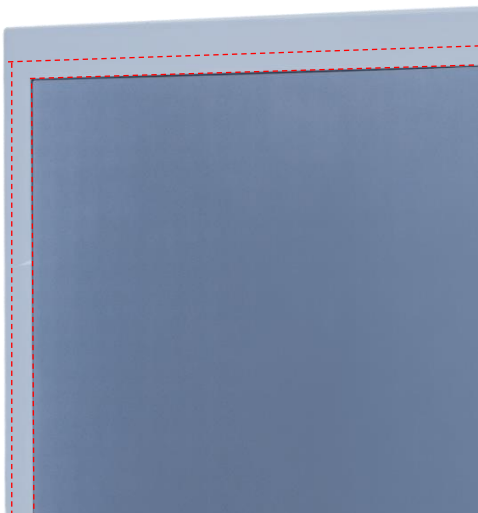
The standard **NTWP238** is true flat surface.

To protect the corners of the touch screen, the Front Cover can be added.

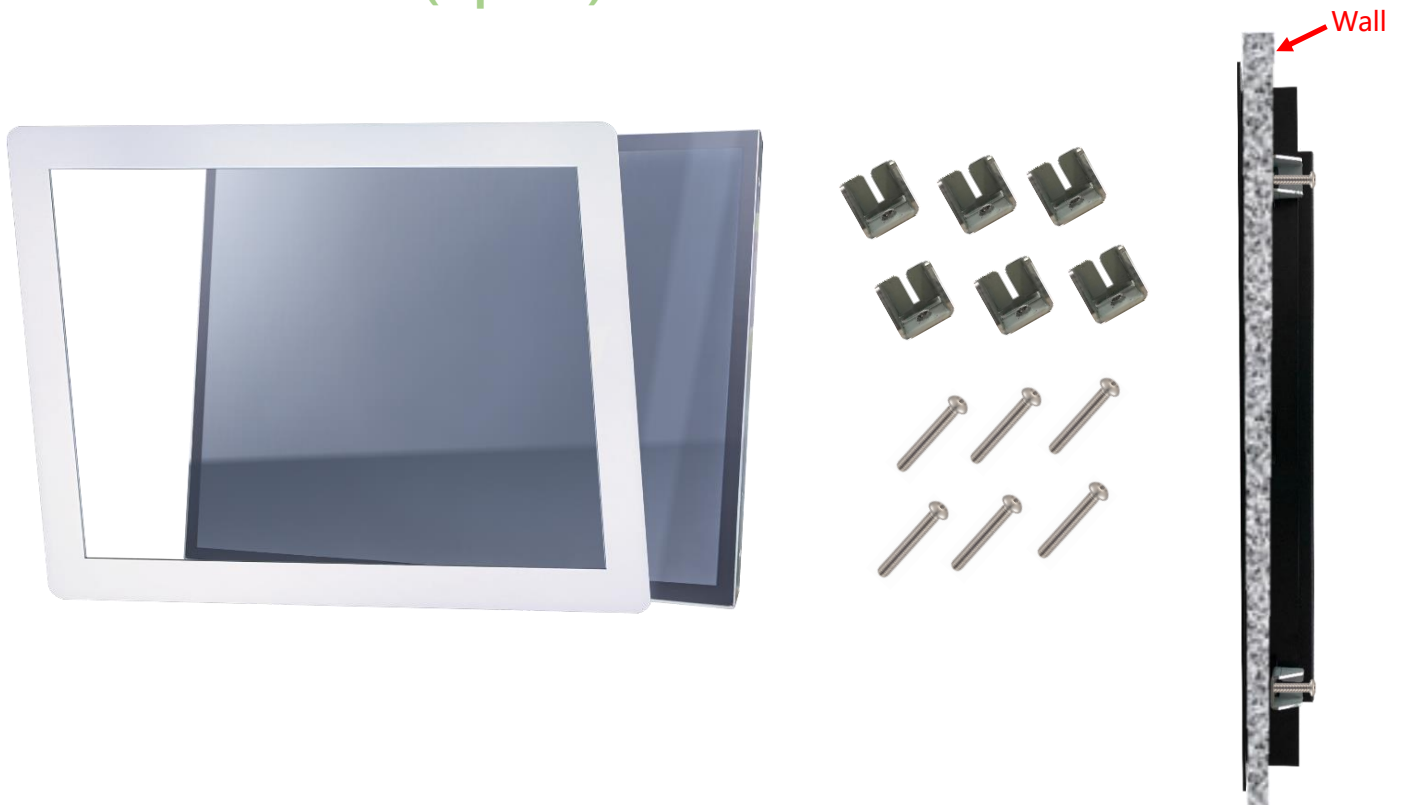


The watertight gasket can be added between the Front Cover and **NTWP238**.

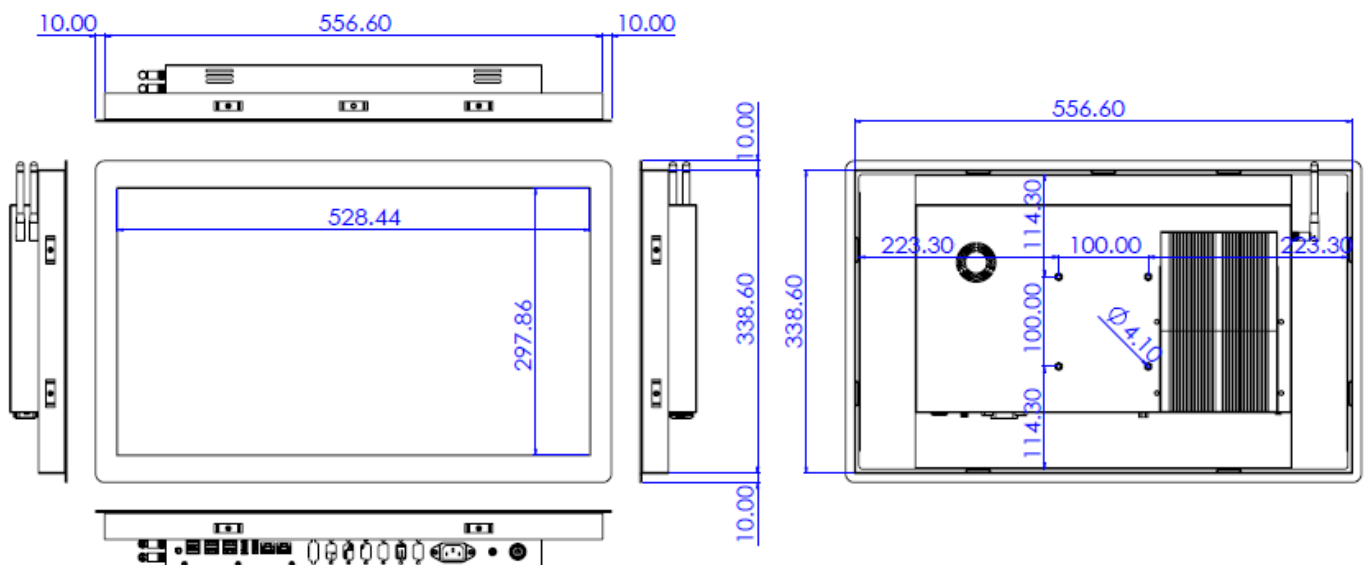
It complies **IP65** on front.

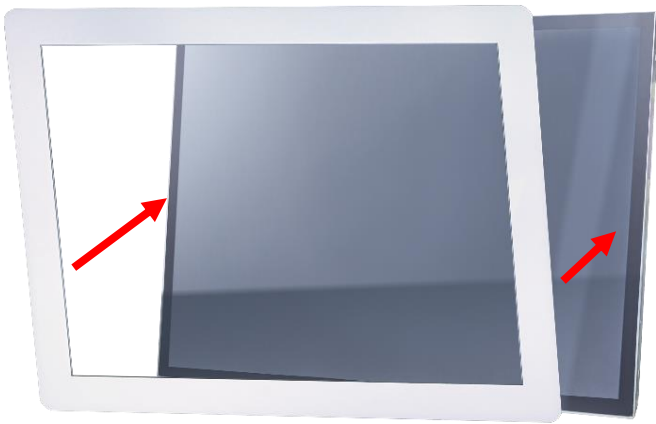


Panel Mount Kits (Option)

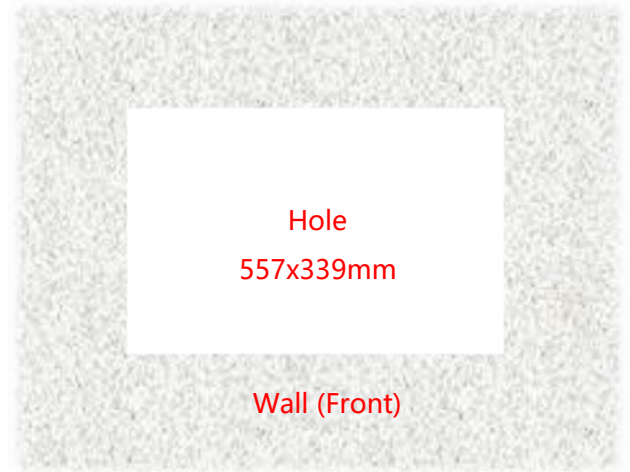


Dimension for Installing with Panel Mount Kits

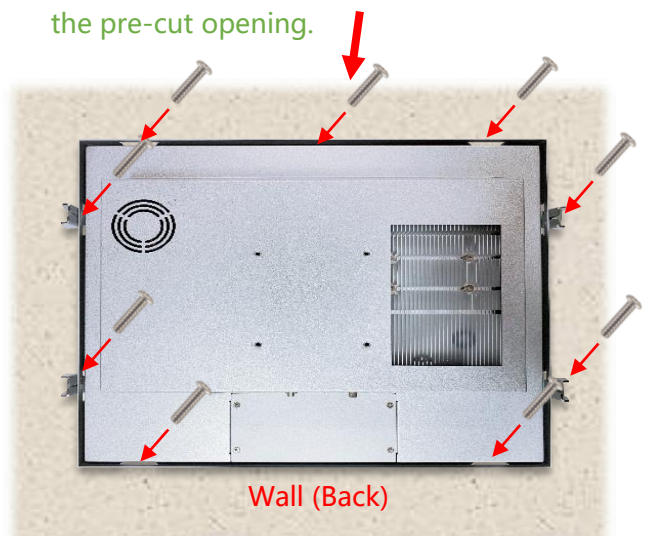




Step 1: Assemble the front module with the screen body. (This step is pre-assembled at the factory.)



Step 2: Insert the screen from the front into the pre-cut opening.



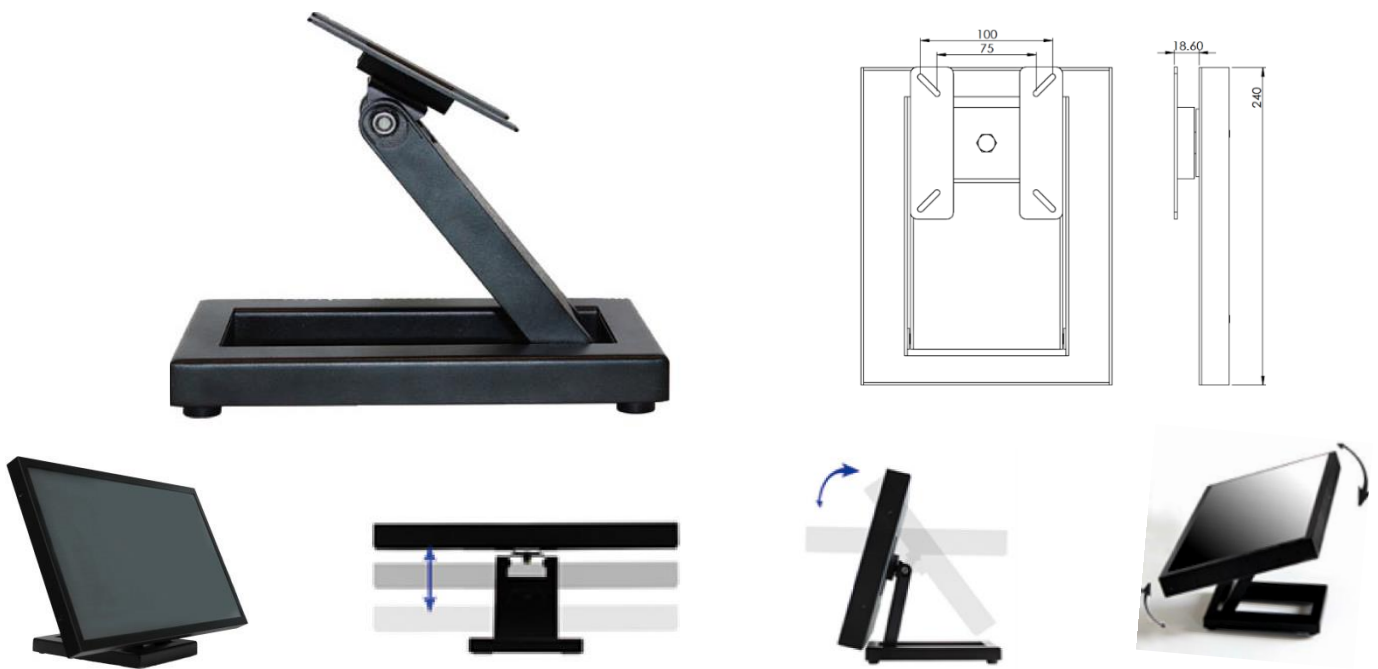
Step 3: Attach the clips from the back and secure with screws. (Up to 9 clips can be installed as needed or per positional limitations.)

Desktop Stand (Option)

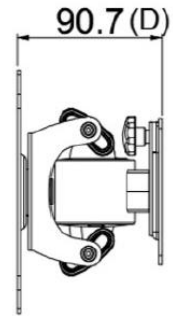
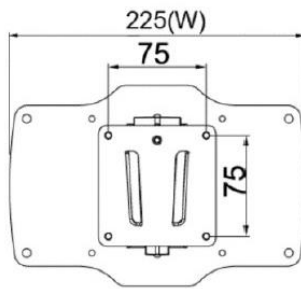
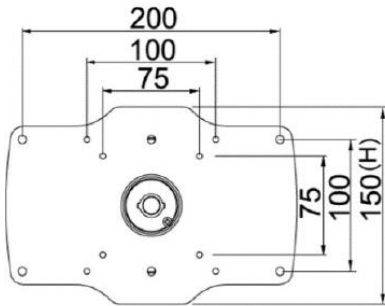
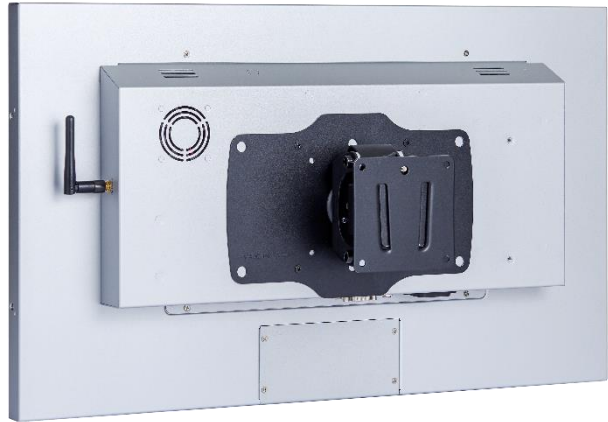
Item	B Stand	Part No.	DST-0B002/DST-1B002
Mounting Pattern	100x100 / 75x75 mm	Dimension (WxHxD)	203x275x227 mm
Material	Steel/Plastic/Aluminum	Net Weight	1.8 KG
Tilt (Hinge)	-2° ~ +180°	Support Max. Weight	15 KG



Item	Z Stand	Part No.	DST-0BZ01/DST-1BZ01
Mounting Pattern	100x100 / 75x75 mm	Dimension (WxHxD)	190x240x41.6
Material	SECC	Net Weight	2.6 KG
Tilt (Hinge)	±360°	Support Max. Weight	15 KG



Wall Mount Bracket (Option)



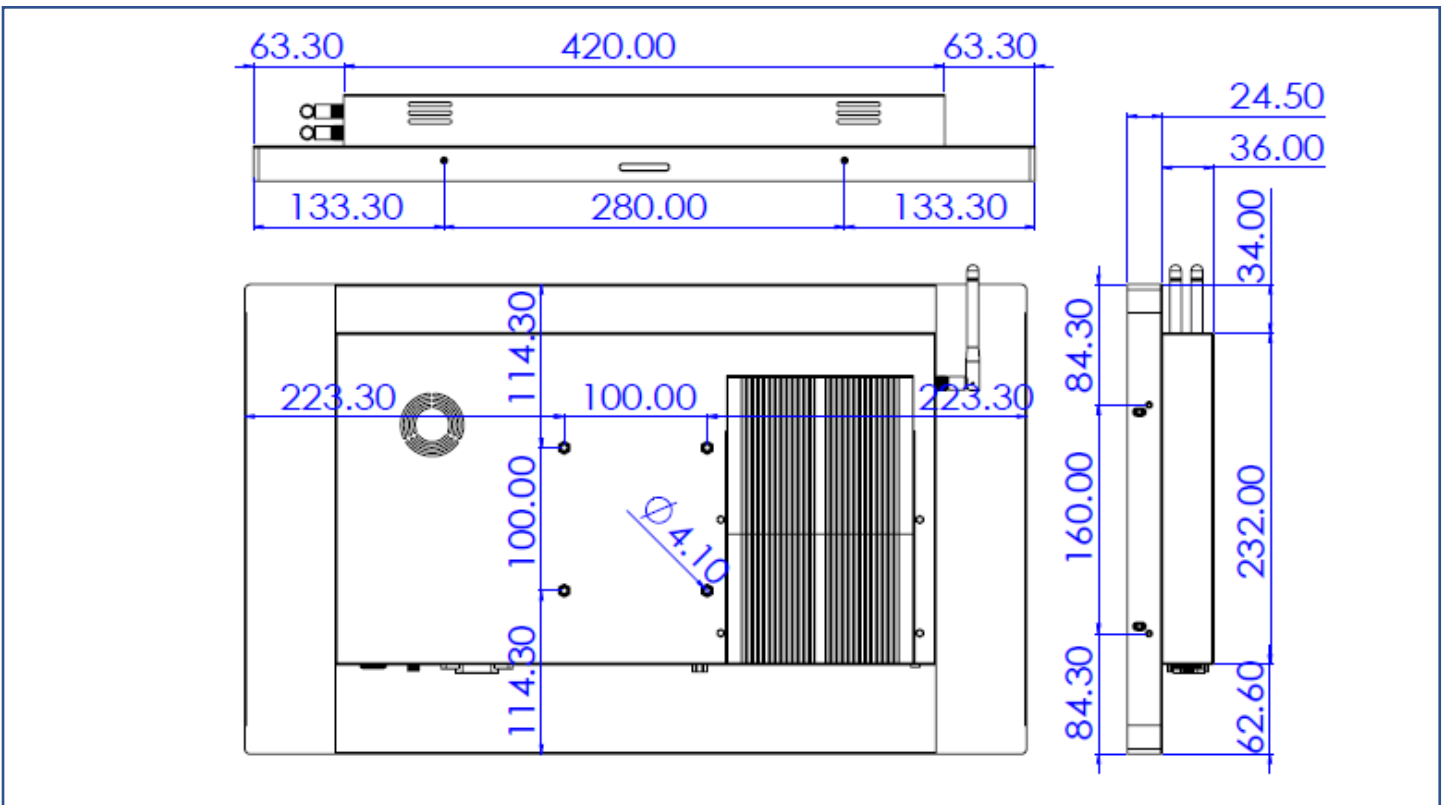
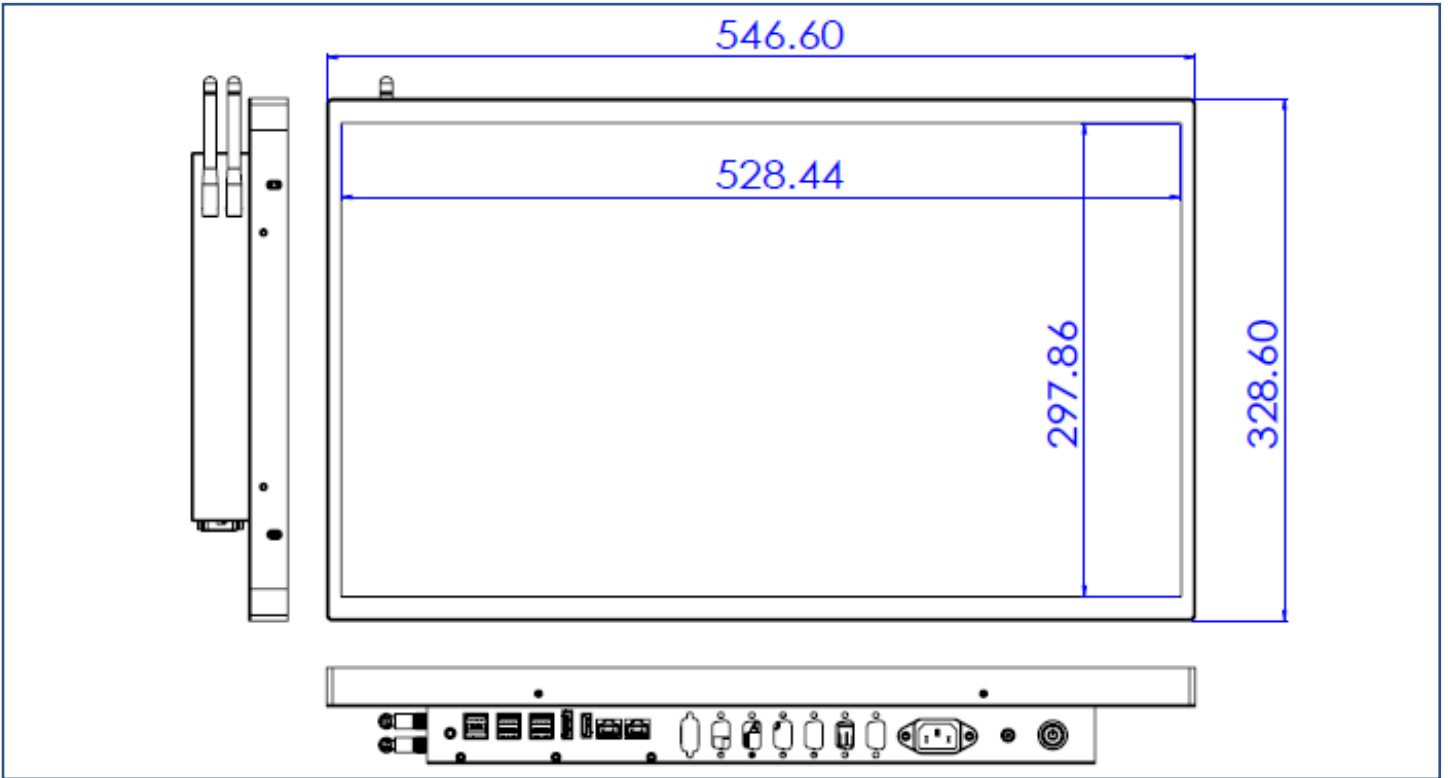
Packing Information



Unit Carton Size	665x160x510 mm
Unit N. Weight	≤7.0 KG
Unit G. Weight	≤9.0 KG
Units per Pallet	30 units
Pallet Size	120x100x171 CM

Physical Specifications

Dimension	546.6x328.6x60.5(±2)mm	Net Weight	≤7.0 KG
VESA Mounting	100x100 mm	Gross Weight	≤9.0 KG



Cosmetic Inspection Standard

Display Area Allowance			
Defect description	Defective Specifications	Allowance	Remarks
Dot Defect (including dark dot, particles, bubbles, pits, dust, foreign matter)	$D \leq 0.2\text{mm}$	Ignored	D=Diameter
	$0.2 < D \leq 0.7\text{mm}$	$N \leq 5$	N=Quantity
	$0.7 < D \leq 1\text{mm}$	$N \leq 3$	
	$D > 1\text{mm}$	$N \leq 0$	
Linear Defect (including scratches, fluff, particles)	$W \leq 0.15\text{mm}$	Ignored	W=Width
	$0.15 < W \leq 0.5\text{mm}, L \leq 15\text{mm}$	$N \leq 2$	L=Length
	$W > 0.5\text{mm}$ or $L > 15\text{mm}$	NG	

* Visual inspection distance: 60cm, 90 degree (same for front/side/back)

Front Appearance Allowance (Including Coating)			
Defect description	Defective Specifications	Allowance	Remarks
Dot Defect (including particles, bubbles, pits...etc.)	$D \leq 0.7\text{mm}$	Ignored	D=Diameter
	$0.7 < D \leq 1.5\text{mm}$	$N \leq 3$	N=Quantity
	$D > 1.5\text{mm}$	$N \leq 0$	
Linear Defect (including scratches, fluff, particles)	$W \leq 0.2\text{mm}, L \leq 15\text{mm}$	Ignored	W=Width, L=Length
	$0.2 < W \leq 0.7\text{mm}, L \leq 15\text{mm}$	$N \leq 1$	
	$W > 0.7\text{mm}$ or $L > 15\text{mm}$	NG	

Side / Back Appearance Allowance (Including Coating)			
Defect description	Defective Specifications	Allowance	Remarks
Dot Defect (including particles, bubbles, pits...etc.)	$D \leq 1.5\text{mm}$	Ignored	D=Diameter
	$1.5 < D \leq 3\text{mm}$	$N \leq 8$	N=Quantity
	$D > 3\text{mm}$	$N \leq 2$	
Linear Defect (including scratches, fluff, particles)	$W \leq 0.8\text{mm}, L \leq 15\text{mm}$	Ignored	W=Width, L=Length
	$0.8 < W \leq 1.5\text{mm}, L \leq 15\text{mm}$	$N \leq 5$	
	$W > 1.5\text{mm}$ or $L > 15\text{mm}$	NG	



Display Area
(Red Area)



Front Appearance (Red Area)



Back Appearance