INDUSTRIAL TOUCH SCREEN COMPUTER

VIO-W315-PC100-ASL

15.6" Full HD IP65 Industrial Touchscreen Computer with Intel Atom® Processor, 1x DP, 3x USB, 2x LAN, 4x COM

Features

- 15.6" Full HD 16:9 LCD with projected capacitive touch / projected capacitive touch
- Intel Atom® x7433RE / x7835RE Processor
- 1x DDR5 4800 MT/s SODIMM. max up to 16GB
- 1x 2.5" Hot-Swappable SATA SSD
- 2x RJ45 LAN, 1x DisplayPort, 1x HDMI
- 2x USB 3.2 Gen 2, 1x USB 3.2 Gen 1, 1x USB-C 3.2 Gen 1
- 8x DI + 8x DO, 4x RS-232/422/485
- 9 to 36VDC wide range power input
- 0°C to 50°C operating temperature
- IP65 compliant front panel

Specifications

Display	
IP Rating	IP65
LCD Size	15.6" (16:9)
Max. Resolution	1920 x 1080 (Full HD)
Brightness (cd/m^2)	450 / 1000 (Optional)
Contrast Ratio	1000:1
LCD Color	16.7M
Pixel Pitch (mm)	0.17925(H) x 0.17925(V)
Viewing Angle	178/178
Backlight Lifetime	50,000 hrs (LED Backlight)

Touch	
Touch Type	Projective Capacitive Resistive 5-Wire (optional)
Surface Hardness	7H / IK07

System	
Processor	
Intel Atom® x7433RE Processor 6M Cache, up to 3.40 GHz ,4 cores ,9W (Default) Intel Atom® x7835RE Processor 6M Cache, up to 3.60 GHz ,8 cores, 12W	
System Chipset	SoC Integrated
LAN Chipset	GbE1: Intel® i226 IT 2.5GbE (Support Wake-on-LAN and PXE) GbE2: Intel® i226 IT 2.5GbE (Support Wake-on-LAN and PXE)
Audio Codec	Realtek ALC888S
System Memory	1x DDR5 4800 MT/s SODIMM. Max. up to 16GB
BIOS	AMI 64Mbit SPI BIOS
Watchdog	Software Programmable Supports 1~255 sec. System Reset
TPM	dTPM2.0

Storage	
SIM Socket	1x Dual Nano SIM socket
SSD/HDD	1x Hotswap 2.5" SATA HDD Bay

Expansion	
M.2	2x M.2 B-Key PCIe x2, USB 3.0 2242/3042/3052 1x M.2 E-Key PCIe x1, USB 2.0 2230
PCIe	1x PCIe Gen 3 x1 Slot (x4 Connector, Shared with M.2 B-Key #2; 1E Model Only)

I/O	
Audio	1x Mic-in, 1x Line-out
CAN	2x CAN 2.0 A/B 2-pin Header (Internal)
COM	4x RS-232/422/485 2x RS-232/422/485 (internal)
DIO	8 in / 8 out (Isolated)
LAN	2x RJ45
USB	1x USB 3.2 Gen 2 (10 Gbps) 1x USB 3.2 Gen 2 (Type C) 1x USB 3.2 Gen 1 (5 Gbps) 1x USB 2.0
DP	1x DisplayPort (4096 x 2160@60Hz)
HDMI	1x HDMI 1.4b (3840 x 2160@30Hz)
Others	4x WiFi Antenna Holes 1x Power Switch, 1x AT/ATX Switch, 1x Remote Power On/Off
Others Features	Others Features
OSD	LCD On/Off, Auto, Menu, Up and Down Multi-language
Speaker	2x 2w 8ohm

Operating System	
Windows	Windows 10/11 IoT Enterprise LTSC (64-bit)
Linux	Ubuntu 22.04 / 24.04 LTS, Linux 5.x / 6.x

Power	
Power Adapter	Optional AC/DC 12V/5A, 60W
Power Mode	AT, ATX
Power Supply Voltage	9~36 VDC
Power Connector	3-Pin Terminal Blcok
Power Protection	OVP (Over Voltage Protection) OCP (Over Current Protection) Reverse Protection Surge Protection (DC mode)

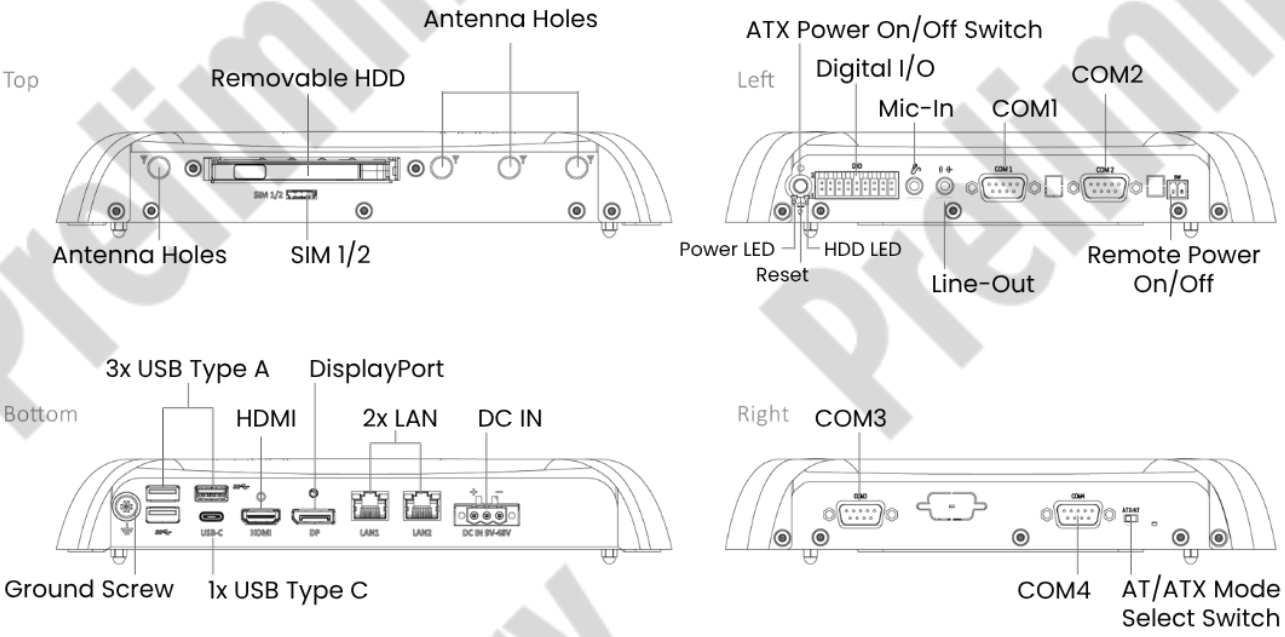
Environment	
Operating Temperature	0 °C to 50 °C
Storage Temperature	-20 °C to 70°C
Relative Humidity	10%~95% (non-condensing)
IP Level	IP 65 Compliant Front Panel
Certification	UL 62368-1 Ed. 3,, CE, FCC Class B
Vibration	With SSD: 3 Grms, 5 - 500 Hz, 0.5 hr/axis With HDD: 1 Grms, 5 - 500 Hz, 0.5 hr/axis
Shock	20G, half sine, 11ms

Physical	
Dimensions	VIO-W315-PC100-ASL: 398 (W) x 247 (D) x 64 (H) mm VIO-W315-PC100-ASL-1E: 398 (W) x 247 (D) x 86 (H) mm
Construction	Extruded Aluminum with Heavy Duty Metal
Mounting	VESA Mounting Holes 75 x 75mm, 100 x 100mm

* All specifications and photos are subject to change without notice.

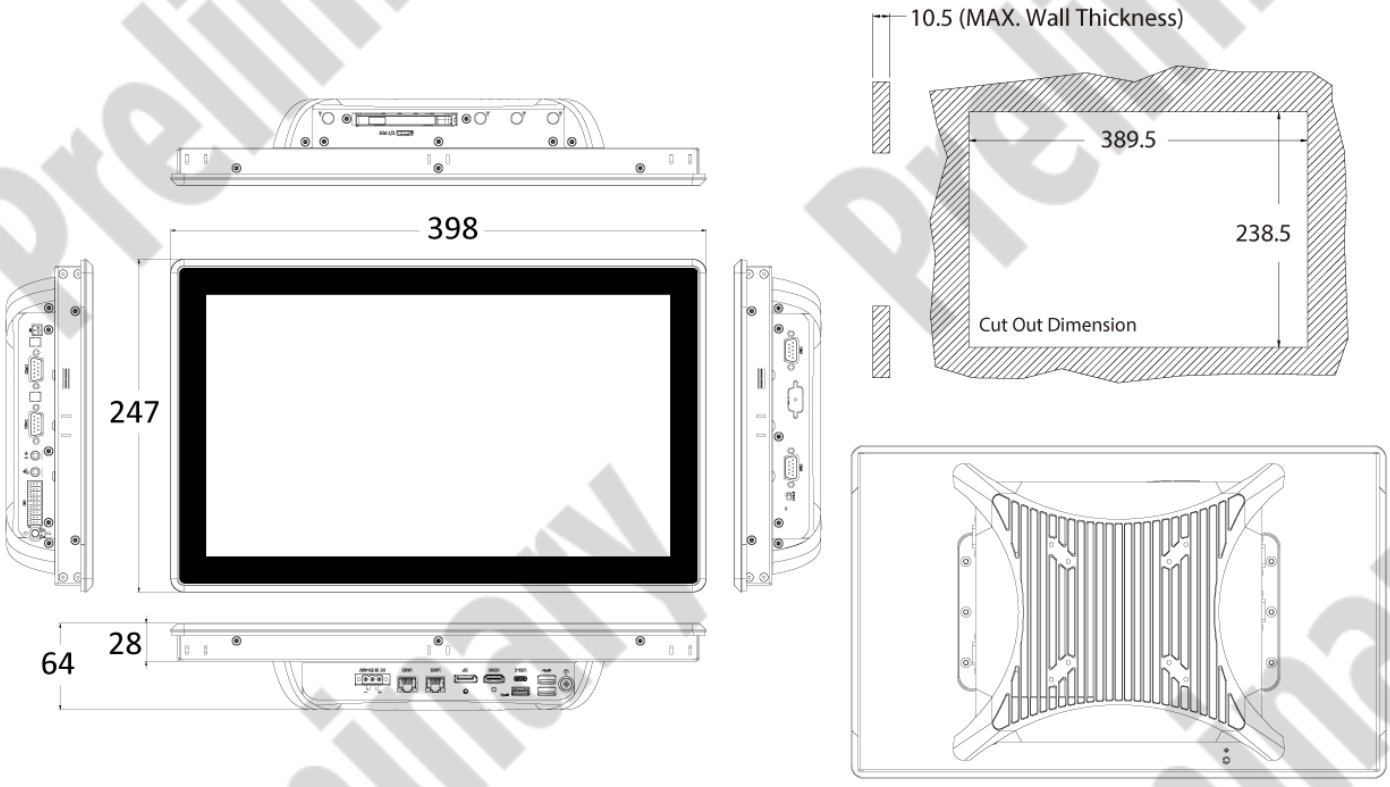
Preliminary

External I/O Mechanical Layout

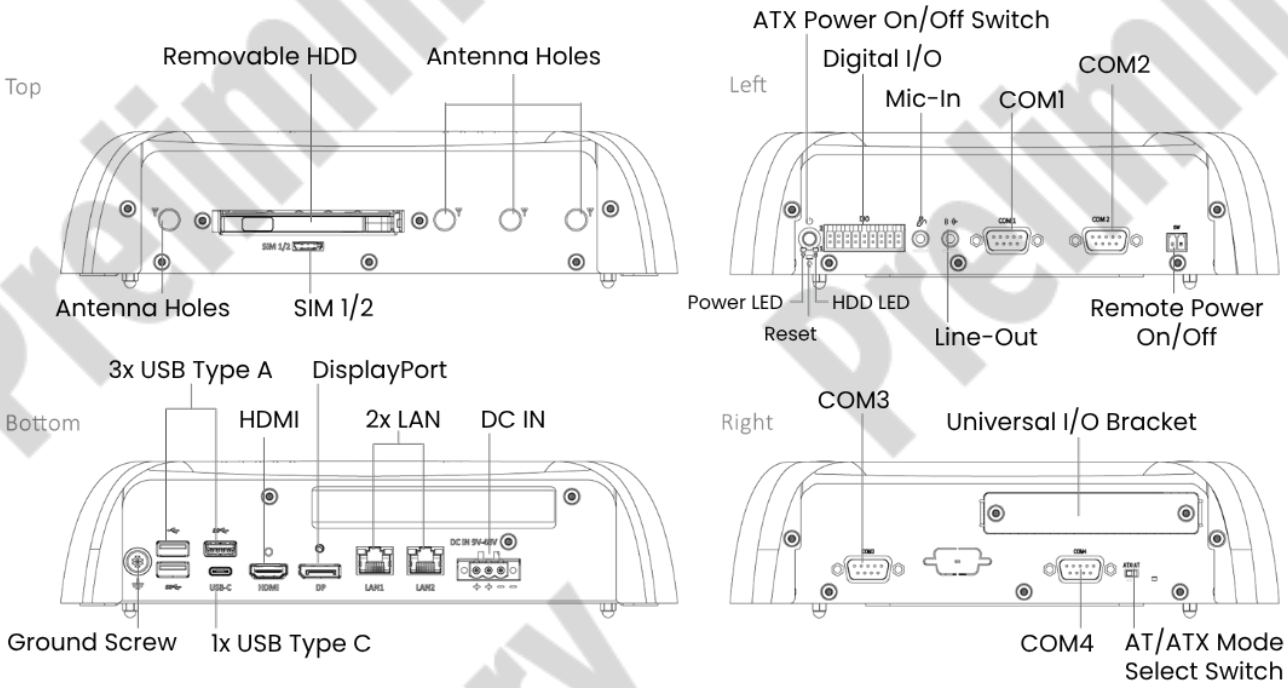


Dimension

Unit: mm

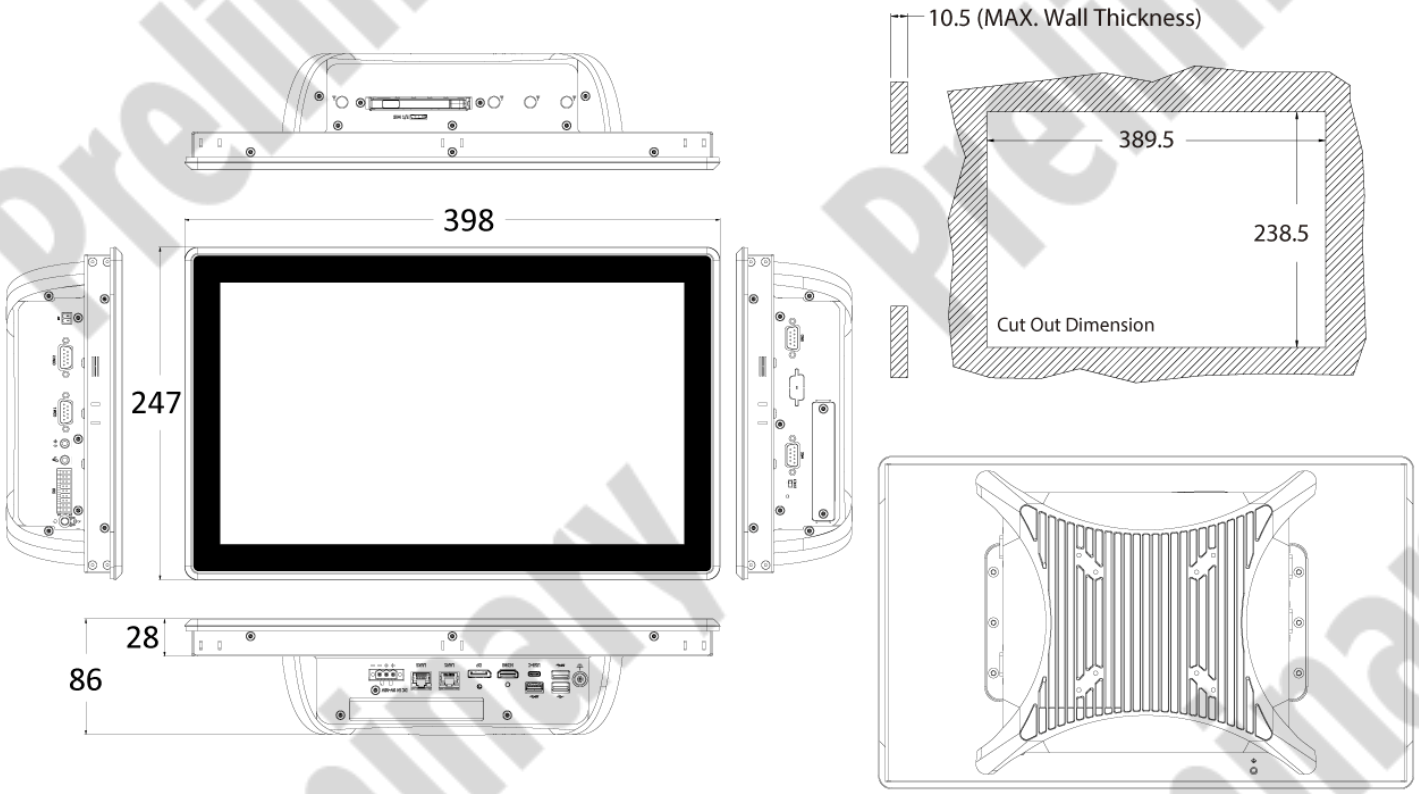


External I/O Mechanical Layout



Dimension

Unit: mm



Preliminary

Compliances and Standards

Shock	20G, half sine, 11ms IEC60068-2-27:2008 Designed to comply with MIL-STD-810H Method 516.8 Procedure I
Vibration	With SSD: 3 Grms, 5 - 500 Hz, 0.5 hr/axis With HDD: 1 Grms, 5 - 500 Hz, 0.5 hr/axis IEC60068-2-64:2008 Designed to comply with MIL-STD-810H Method 514.8 Procedure I
Operating Temperature	0 °C to 50 °C IEC60068-2-1:2007 (Cold test procedure) IEC60068-2-2:2007 (Dry heat test procedure) IEC60068-2-3:2007 (Damp heat, steady state, test procedure) IEC60068-2-14:2009 (Wide temperature range thermal shock)
EMI	• FCC Class B • CE • ICES-003 • UKCA
Safety	• UL Safety: UL62368-1, 3rd Ed., (cULus) • Test prcedure: CB Scheme • Standard: IEC 62368-1:2018

Available Models

Model No.	Description
VIO-W315-PC100-ASL	15.6" Full HD IP65 Industrial Touchscreen Computer with Intel Atom® Processor, 1x DP, 3x USB, 2x LAN, 4x COM
VIO-W315-PC100-ASL-1E	15.6" Full HD IP65 Industrial Touchscreen Computer with Intel Atom® Processor, 1x DP, 3x USB, 2x LAN, 4x COM, 1x Universal I/O Bracket

Optional Accessories

Model No.	Description
1-E09A15002	AC-DC Power Adapter with 3P Terminal Block Plug 5.0mm_20Vdc_7.5A_150W
1-TPCD00008	Power Cord 3Pin 1830mm C5 US Type
1-TPCD00009	Power Cord 3Pin 1830mm C5 EU Type
1-TPCD00011	Power Cord 3Pin 1830mm C5 UK Type

Packing List

- 1x VIO-W315-PC100-ASL / 1x VIO-W315-PC100-ASL-1E
- 1x Screw Pack

US Exports And Tariff Codes

ECCN	5A992.c
HTS	8471.50.0150
Schedule B	84.71

Preliminary

Premio Inc.
918 Radecki Ct., City of Industry
CA 91748, United States
Toll Free: 800.977.3646

Premio Taiwan Inc.
18F, No.176, Jianyi Road, Zhonghe District,
New Taipei City 235603, Taiwan
Toll Free: 886.2.7731.7888

Email: sales@premioinc.com
Website: https://premioinc.com