

VIO-W221-PC311E

Panel PC - HMI

FEATURES

- 21.5" TFT FHD 16:9 LCD with resistive 5-wire / projected capacitive touch
- Intel® Core™ processor i5-5350U, up to 2.9GHz / i3-5010U, 2.1GHz or Celeron® 3765U, 1.9GHz
- 1x 204-pin DDR3L SODIMM. max up to 8GB
- 1x 2.5" SATA HDD bay support RAID 0,1, 5, 2x mSATA, 2x SIM socket
- 2x full-size mini PCIe for communication or expansion modules
- 1x PCIe x4 expansion
- 2x LAN, 1x VGA, 1x DisplayPort
- 4x RS-232/422/485 (w/ 2x internal), 3x USB 3.0, 1x USB 2.0, Audio, DIO
- 9 to 48VDC wide range power input
- -10°C to 60°C extended operating temperature
- Designed with aluminum die-casting front Frame
- IP65 compliant front panel
- Two 10W internal speakers built-in
- Multi-language OSD built-in



SPECIFICATIONS

DISPLAY

| | |
|---------------------|---------------------------|
| LCD Size | 21.5" (16:9) |
| Max. Resolution | 1920 x 1080 (Full HD) |
| Brightness (cd/m²) | 300 |
| Contrast Ratio | 5000:1 |
| LCD Color | 16.7M |
| Pixel Pitch (mm) | 0.248 (H) x 0.248 (V) |
| Viewing Angle (H-V) | 178 / 178 |
| Backlight MTBF | 50000 hrs (LED Backlight) |

TOUCH

| | |
|----------------------|-----------------------|
| Resistive 5-wire | VIO-W221R/PC311E Only |
| Projected Capacitive | VIO-W221C/PC311E Only |

SYSTEM

| | |
|----------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Processor | - 5 th Gen Intel® Core™ i5-5350U Processor, Dual Core, 3MB Cache, up to 2.9 GHz - 5 th Gen Intel® Core™ i3-5010U Processor, Dual Core, 3MB Cache, 2.1 GHz - 5 th Gen Intel® Celeron® Processor 3765U, Dual Core, 2MB Cache, 1.9 GHz |
| System Chipset | SoC integrated |
| LAN Chipset | GbE1: Intel® I210-AT (Support Wake-on-LAN and PXE) GbE2: Intel® I218-LM (Support Wake-on-LAN and PXE) |
| Audio Codec | Realtek ALC888S |
| System Memory | 1x 204-Pin DDR3L 1333/1600MHz SODIMM. Max. up to 8GB |
| BIOS | AMI 128Mbit SPI BIOS |
| Watchdog | Software Programmable Supports 1~255 sec. System Reset |

STORAGE

| | |
|------------|-----------------------------------------------------|
| SSD/HDD | 1x Removable 2.5" SATA HDD Bay Support RAID 0, 1, 5 |
| mSATA | 2x mSATA (Shared by 2x Mini PCIe) |
| SIM Socket | 2x External SIM socket |

EXPANSION

| | |
|------------------|------------------------|
| Mini PCI Express | 2x Full-size Mini PCIe |
| PCI Express | 1x PCIe x4 |

OTHER FEATURES

| | |
|------------------|----------------------------------------------------|
| Internal Speaker | AMP 10W + 10W |
| OSD | LCD On/Off, Auto, Menu, Up and Down Multi-language |

I/O

| | |
|-----------------------|---------------------------------------------------------------------------------------|
| VGA | 1x VGA (or 1x DVI-D by Order) |
| DisplayPort | 1x DisplayPort |
| COM | 2x RS-232/422/485 2x RS-232/422/485 (internal) |
| USB | 3x USB 3.0, 1x USB 2.0 |
| LAN | 2x RJ45 |
| Audio | 1x Mic-in, 1x Speaker-out |
| DIO | 4 in / 4 out (Isolated) |
| Universal I/O Bracket | 1x Universal I/O Bracket (By mini PCIe interface) |
| Others | 3x WiFi Antenna Holes 1x Power Switch, 1x AT/ATX Switch, 1x Remote Power On/Off |

OPERATING SYSTEM

| | |
|---------|--------------------------------------------------|
| Windows | Windows 10, Windows 8.1, WES8.1, Windows 7, WES7 |
| Linux | Linux kernel 3.X |

POWER

| | |
|------------------------|--------------------------------------------------------------------------------------|
| Power Mode | AT, ATX |
| Power Supply Voltage | 9~48VDC |
| Power Ignition Sensing | Power Ignition Management |
| Power Connector | 3-pin Terminal Block |
| Power Adaptor | Optional AC/DC 12V/5A, 60W |
| Power Protection | OVP (Over Voltage Protection) OCP (Over Current Protection) Reverse Protection |

ENVIRONMENT

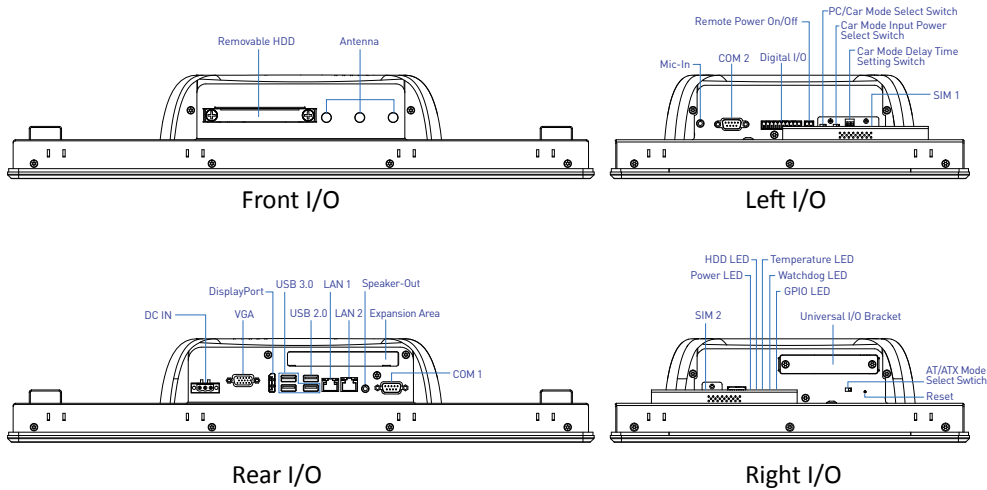
| | |
|---------------------------|-----------------------------|
| Operating Temp. | -10°C to 60°C |
| Storage Temp. | -20°C to 60°C |
| Relative Humidity | 10%~80% (non-condensing) |
| IP Level | IP 65 Compliant Front Panel |
| Standards / Certification | CE, FCC Class A |

PHYSICAL

| | |
|--------------------------|--------------------------------------------------------|
| Front Panel Construction | Die-cast Flat Surface |
| Dimension | 528.5 (W) x 324 (D) x 93 (H)mm |
| Weight | VIO-W221R/PC311E: 8.99 kg VIO-W221C/PC311E: 8.67 kg |
| Mounting | VESA Mounting Holes 75 x 75mm, 100 x 100mm |

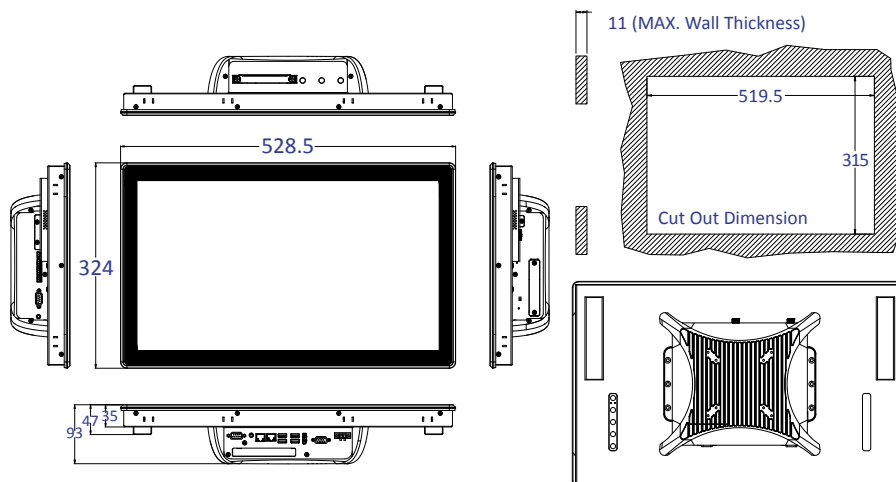
Panel PC - HMI

EXTERNAL I/O MECHANICAL LAYOUT



DIMENSION

Unit: mm



AVAILABLE MODELS

| MODEL NO. | DESCRIPTION |
|------------------------|----------------------------------------------------------------------------------------------------------------|
| VIO-W221R/PC311E-5350U | 21.5" 16:9 FHD Resistive Touch Thin Frame Panel PC with Intel® i5-5350U Processor, 1x PCIe x4 Expansion |
| VIO-W221C/PC311E-5350U | 21.5" 16:9 FHD Capacitive Touch Thin Frame Panel PC with Intel® i5-5350U Processor, 1x PCIe x4 Expansion |
| VIO-W221R/PC311E-5010U | 21.5" 16:9 FHD Resistive Touch Thin Frame Panel PC with Intel® i3-5010U Processor, 1x PCIe x4 Expansion |
| VIO-W221C/PC311E-5010U | 21.5" 16:9 FHD Capacitive Touch Thin Frame Panel PC with Intel® i3-5010U Processor, 1x PCIe x4 Expansion |
| VIO-W221R/PC311E-3765U | 21.5" 16:9 FHD Resistive Touch Thin Frame Panel PC with Intel® Celeron® 3765U Processor, 1x PCIe x4 Expansion |
| VIO-W221C/PC311E-3765U | 21.5" 16:9 FHD Capacitive Touch Thin Frame Panel PC with Intel® Celeron® 3765U Processor, 1x PCIe x4 Expansion |

OPTIONAL ACCESSORIES

| MODEL NO. | DESCRIPTION |
|-------------|--------------------------------------------------------------------|
| 1-E09A06007 | Adapter AC/DC 12V 5A 60W with 3pin Terminal Block Plug 5.0mm Pitch |
| SFICBL022 | Power Cord, 3-pin US Type, 180cm |
| 1-TPCD00002 | Power Cord, European Type, 180cm |
| 1-TPCD00001 | Power Cord, 3-pin UK Type, 180cm |

PACKING LIST

- 1x VIO-W221/PC300 Series Panel PC
- 12x Panel Mount Kit
- 1x Utility DVD Driver
- 1x Screw Pack