



INDUSTRIAL TOUCH SCREEN COMPUTER

VIO-W224-PC100-EHL

24" Full HD Resistive / Capacitive Touch Thin Frame Industrial Touchscreen Computer with Intel® Celeron® J6413

Features

- 23.8" TFT Full HD 16:9 LCD with resistive 5-wire / projected capacitive touch
- Intel® Celeron® Processor J6413
- 1x 260-pin DDR4 SODIMM. max up to 32GB
- 1x 2.5" SATA HDD bay, 1x mSATA, 2x SIM socket
- 1x Full-size Mini PCIe (USB 2.0, SATA)
- 2x LAN, 1x DP, 1x HDMI
- 6x RS-232/422/485 (w/ 2x internal)
- 2x USB 3.2 Gen 2, 2x USB 2.0
- 8x DI + 8x DO with isolation
- 9 to 36VDC wide range power input
- 0°C to 50°C extended operating temperature
- Designed with aluminum die-casting front frame
- IP65 compliant front panel / Fanless Industrial Display Computer
- Two 10W internal speakers built-in
- Multi-language OSD built-in
- 1x Universal I/O Bracket for 2x COM Expansion (PC100-EHL-1E Model)
- Edge AI Ready with Hailo-8™ (26 TOPS / 2.5W)
- UL Listed



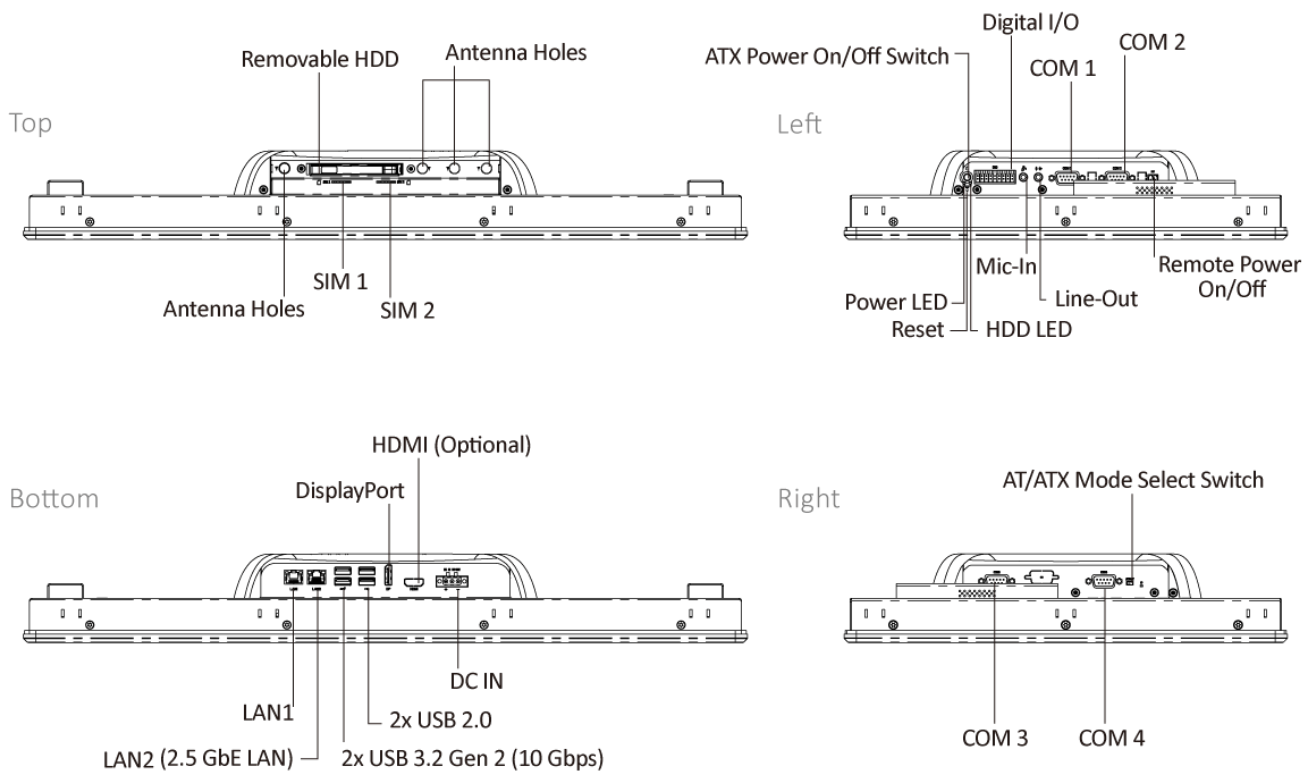
Specifications

| Display                         |                                                                                                           |
|---------------------------------|-----------------------------------------------------------------------------------------------------------|
| IP Rating                       | IP65                                                                                                      |
| LCD Size                        | 23.8" (16:9)                                                                                              |
| Max. Resolution                 | 1920 x 1080 (Full HD)                                                                                     |
| Brightness (cd/m <sup>2</sup> ) | 450 / 1000 (Optional)                                                                                     |
| Contrast Ratio                  | 1000:1                                                                                                    |
| LCD Color                       | 16.7M                                                                                                     |
| Pixel Pitch (mm)                | 0.2745(H) x 0.2745(V)                                                                                     |
| Viewing Angle                   | 178/178                                                                                                   |
| Backlight MTBF                  | 30000 hrs (LED Backlight)                                                                                 |
| Touch Type                      | Resistive 5-Wire<br>Projective Capacitive                                                                 |
| System                          |                                                                                                           |
| Processor                       | Intel® Celeron® J6413 Processor Quad core (1.5M Cache,1.8GHz up to 3.00 GHz) FC-BGA16F, Tray 10W          |
| System Chipset                  | SoC Integrated                                                                                            |
| LAN Chipset                     | GbE1: Intel® I210 (Support Wake-on-LAN and PXE)<br>2.5 GbE2: Intel® I225 (Support Wake-on-LAN and PXE)    |
| Audio Codec                     | Realtek ALC888S                                                                                           |
| System Memory                   | 1x 260-Pin DDR4 2400/2667/3200MT/s SODIMM.<br>Max. up to 32 GB                                            |
| BIOS                            | AMI 128Mbit SPI BIOS                                                                                      |
| TPM                             | TPM 2.0                                                                                                   |
| Watchdog                        | Software Programmable Supports 1~255 sec. System Reset                                                    |
| AI Accelerator                  | Supports 1x Hailo-8™ module                                                                               |
| Storage                         |                                                                                                           |
| M.2                             | 1x M.2 (E Key, PCIe x1, USB 2.0, 2230)<br>1x M.2 (B Key, PCIe x2 + USB 3.2 Gen1, 2242/3042/3052)          |
| mSATA                           | 1x mSATA                                                                                                  |
| SIM Socket                      | 2x External SIM socket                                                                                    |
| SSD/HDD                         | 1x Removable 2.5" SATA HDD Bay                                                                            |
| Expansion                       |                                                                                                           |
| Mini PCIe                       | 1x Full-size Mini PCIe (USB 2.0, SATA)                                                                    |
| PCIe                            | PC100-EHL-1E: 1x PCIe x4 (1-lane)                                                                         |
| 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<br>2x RS-232/422/485 (internal)                                                         |
| DIO                             | 8 in / 8 out (Isolated)                                                                                   |
| LAN                             | 2x RJ45                                                                                                   |
| Universal I/O Bracket           | PC100-EHL-1E :<br>1x Universal I/O Bracket (By mini PCIe interface)                                       |
| USB                             | 2x USB 3.2 Gen 2 (10 Gbps)<br>2x USB 2.0                                                                  |
| DP                              | 1x DisplayPort 1.2 (4096 x 2160@60Hz)                                                                     |
| HDMI                            | 1x HDMI 2.0b (4096 x 2160@60Hz) (Optional)                                                                |
| Others                          | 4x WiFi Antenna Holes<br>1x Power Switch, 1x AT/ATX Switch, 1x Remote Power On/Off<br>1x DB9 Cutting Hole |
| Optical Bonding                 | Optional, contact us for more information                                                                 |
| Others Features                 |                                                                                                           |
| Speaker                         | AMP 10W + 10W                                                                                             |
| OSD                             | LCD On/Off, Auto, Menu, Up and Down Multi-language                                                        |
| Operating System                |                                                                                                           |
| Windows                         | Windows 10, Windows 11                                                                                    |

| Linux                 | Linux kernel 5.X                                                                                                                                                                                      |
|-----------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Power                 |                                                                                                                                                                                                       |
| Power Adapter         | Optional AC/DC 12V/5A, 60W                                                                                                                                                                            |
| Power Management      | Power Ignition Management (Optional Module)                                                                                                                                                           |
| Power Mode            | AT, ATX                                                                                                                                                                                               |
| Power Supply Voltage  | 9~36 VDC                                                                                                                                                                                              |
| Power Connector       | 3-Pin Terminal Blcok                                                                                                                                                                                  |
| Power Protection      | OVP (Over Voltage Protection)<br>OCP (Over Current Protection)<br>Reverse Protection                                                                                                                  |
| Environment           |                                                                                                                                                                                                       |
| Operating Temperature | 0°C to 50°C                                                                                                                                                                                           |
| Storage Temperature   | -20°C to 60°C                                                                                                                                                                                         |
| Relative Humidity     | 10%~80% (non-condensing)                                                                                                                                                                              |
| IP Level              | IP 65 Compliant Front Panel                                                                                                                                                                           |
| Certification         | UL 62368 Ed. 3, CE, FCC Class A                                                                                                                                                                       |
| Vibration             | With SSD: 1.5 Grms, 5 - 500 Hz, 0.5 hr/axis<br>With HDD: 1 Grms, 5 - 500 Hz, 0.5 hr/axis                                                                                                              |
| Shock                 | With SSD: 20G, half sine, 11ms                                                                                                                                                                        |
| Physical              |                                                                                                                                                                                                       |
| Dimensions            | VIO-W224-PC100-EHL: 588 (W) x 360 (D) x 71.8 (H) mm<br>VIO-W224-PC100-EHL-1E: 588 (W) x 360 (D) x 93.8 (H) mm                                                                                         |
| Weights               | VIO-W224-PC100-EHL, Resistive Touch: 9.57 kg<br>VIO-W224-PC100-EHL, Capacitive Touch: 9.82 kg<br>VIO-W224-PC100-EHL-1E, Resistive Touch: 9.86 kg<br>VIO-W224-PC100-EHL-1E, Capacitive Touch: 10.11 kg |
| Mounting Options      | VESA Mounting Holes 75 x 75mm, 100 x 100mm                                                                                                                                                            |

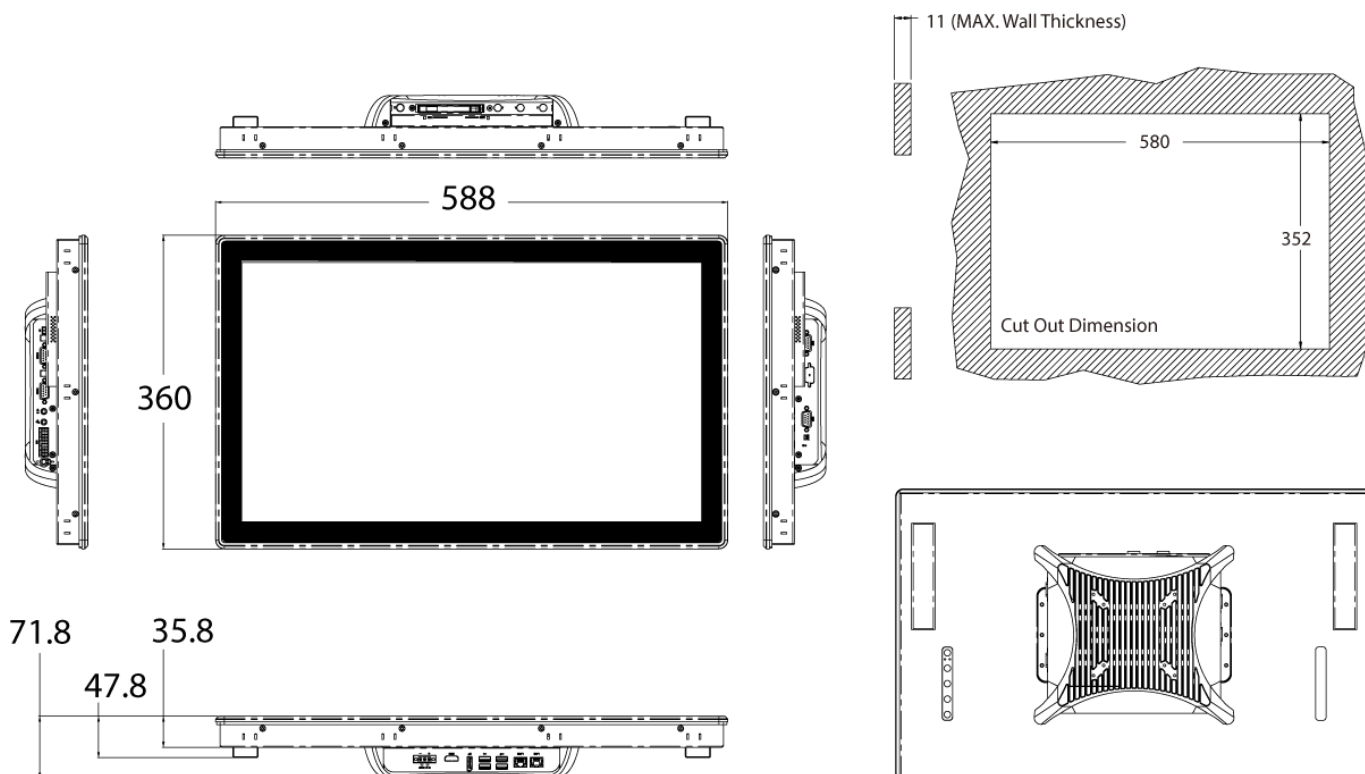
\* All specifications and photos are subject to change without notice.

## External I/O Mechanical Layout

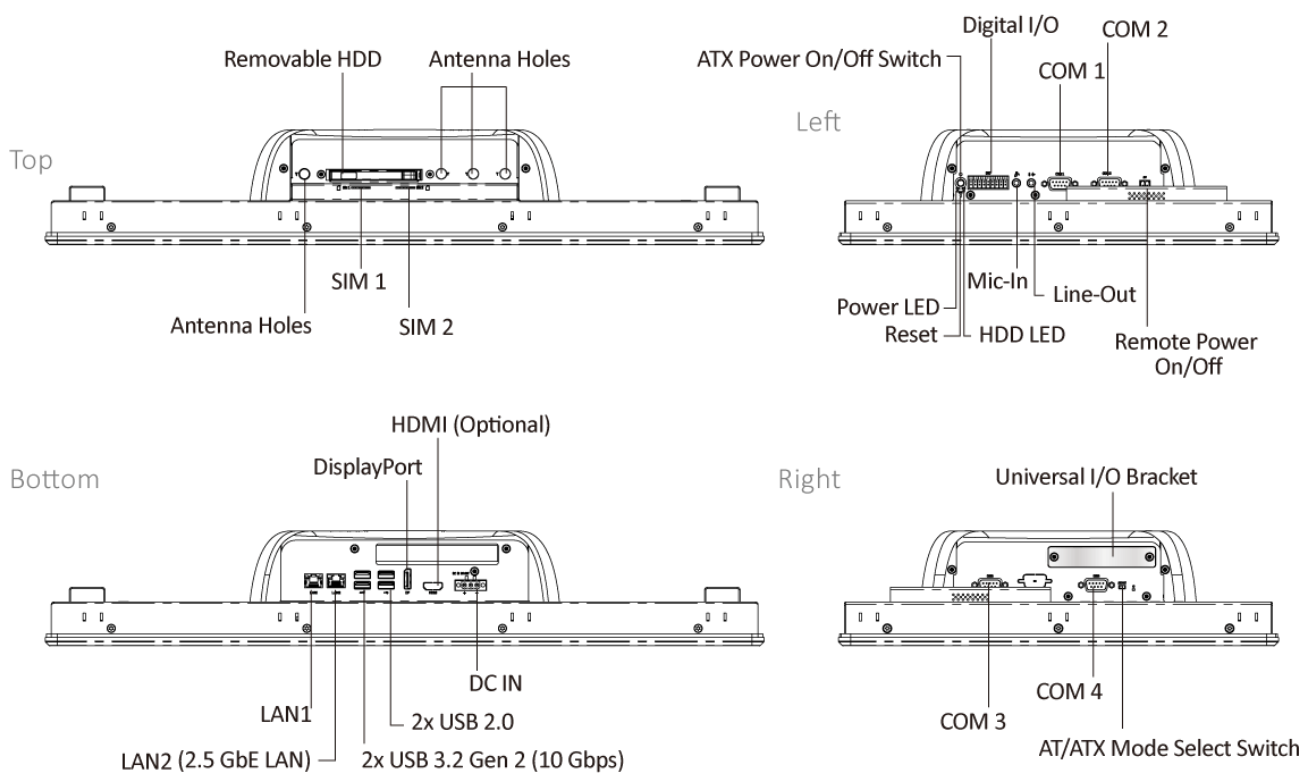


## Dimension

Unit: mm

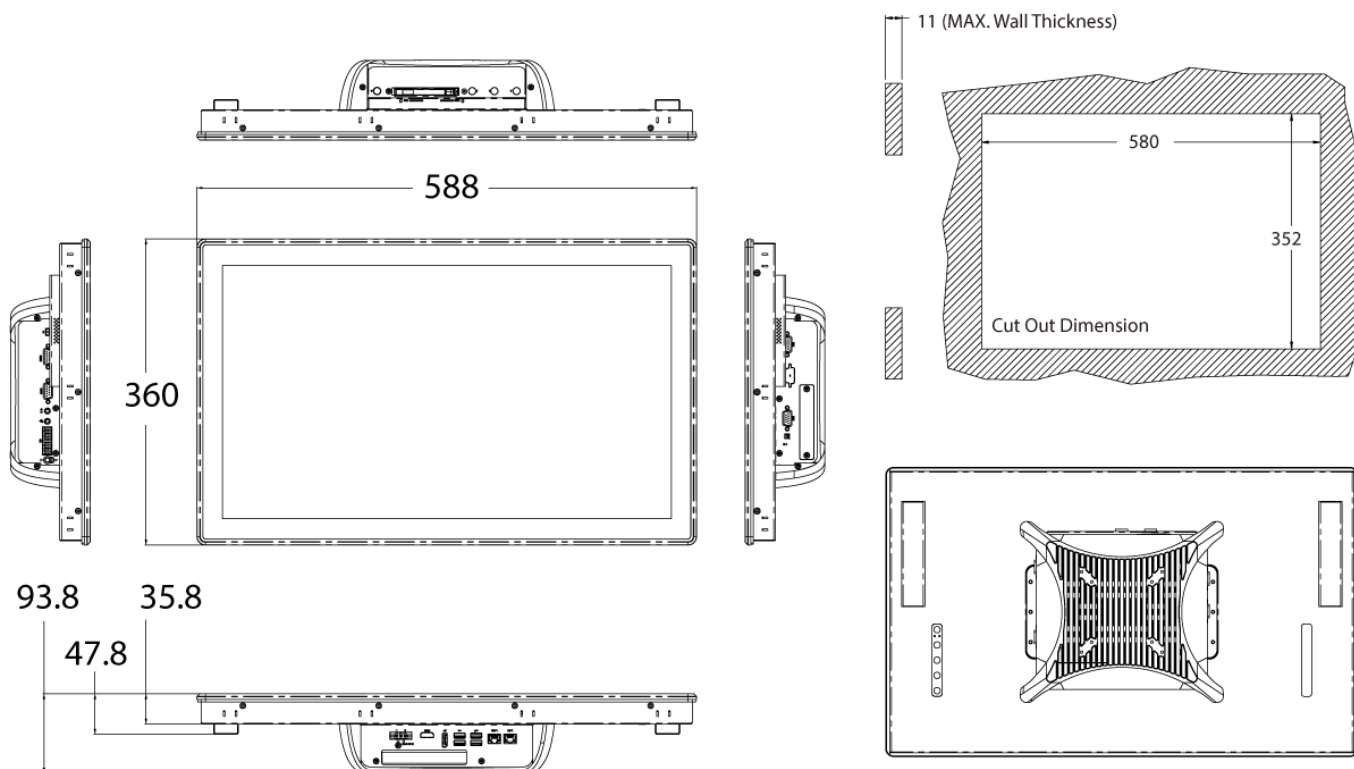


## External I/O Mechanical Layout



## Dimension

Unit: mm



## Available Models

| Model No.            | Description                                                                         |
|----------------------|-------------------------------------------------------------------------------------|
| VIO-W224C-10         | 23.8" 16:9 FHD Capacitive Touch Thin Frame Display Module with 2x 10W Speaker       |
| VIO-W224HC-10        | VIO-W224HC,23.8",16:9,FHD,CAPACITIVE,HB,2X10W SPK,V10                               |
| VIO-W224HC-10-OB     | VIO-W224HC,23.8",16:9,FHD,CAPACITIVE,HB,OB,2X10W SPK,V10                            |
| VIO-W224HR-10        | VIO-W224HR,23.8",16:9,FHD,RESISTIVE,HB,2X10W SPK,V10                                |
| VIO-W224HR-10-OB     | VIO-W224HR,23.8",16:9,FHD,RESISTIVE,HB,OB,2X10W SPK,V10                             |
| VIO-W224R-10         | 23.8" 16:9 FHD Resistive Touch Window Thin Frame Display Module with 2x 10W Speaker |
| PC100-EHL-J6413-P    | PC100-EHL-J6413,60W,POWER CORD                                                      |
| PC100-EHL-J6413-10-P | PC100-EHL-J6413,PCIEX4(X1),60W,POWER CORD                                           |

## Optional Accessories

| Model No.            | Description                                                        |
|----------------------|--------------------------------------------------------------------|
| 1-E09A06008          | Adapter AC/DC 12V 5A 60W with 3pin Terminal Block Plug 5.0mm Pitch |
| 999930               | Power Cord, 3-pin US Type, 180cm                                   |
| 1-TPCD00002          | Power Cord, European Type, 180cm                                   |
| 1-TPCD00001          | Power Cord, 3-pin UK Type, 180cm                                   |
| PC100-2COM-KIT       | MOD,2XDB9(COM 5,6) KIT,PC100-EHL                                   |
| PC100-EHL-5G-KIT     | MOD,PC100-EHL,5G,THALES,KIT                                        |
| PC100-EHL-10-5G-KIT  | MOD,PC100-EHL-10,5G,THALES,KIT                                     |
| PC100-EHL-TPU-KIT    | MOD,PC100-EHL,TPU,HAILO-8,KIT                                      |
| PC100-EHL-10-TPU-KIT | MOD,PC100-EHL-10,TPU,HAILO-8,KIT                                   |
| 3-PC1200AIKIT-S0     | MOD,HAILO/NVME THERMAL KIT,PC100-EHL                               |
| 3-PC1210AIKIT-S0     | MOD,HAILO/NVME THERMAL KIT,PC100-EHL-10                            |
| 1-TCAN00001          | CBL,CANBUS,DB9,DUAL CHANNEL                                        |

## Packing List

- 1x VIO-200-PC100-EHL Series
- 10x Panel Mount Kit
- 1x Screw Pack

## Compliances and Standards

|                       |                                                                                                                                                                                                                                   |
|-----------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Shock                 | With SSD: 20G, half sine, 11ms<br>IEC60068-2-27:2008<br>Designed to comply with MIL-STD-810G Method 516.7 Procedure I                                                                                                             |
| Vibration             | With SSD: 1.5 Grms, 5 - 500 Hz, 0.5 hr/axis<br>With HDD: 1 Grms, 5 - 500 Hz, 0.5 hr/axis<br>IEC60068-2-64:2008<br>Designed to comply with MIL-STD-810G Method 514.7 Procedure I                                                   |
| Operating Temperature | 0°C to 50°C<br>IEC60068-2-1:2007 (Cold test procedure)<br>IEC60068-2-2:2007 (Dry heat test procedure)<br>IEC60068-2-3:2007 (Damp heat, steady state, test procedure)<br>IEC60068-2-14:2009 (Wide temperature range thermal shock) |
| EMI                   | <ul style="list-style-type: none"> <li>• FCC Class A (47 CFR part 15.109 and part 15.107)</li> <li>• CE</li> <li>• ICES-003</li> <li>• UKCA</li> </ul>                                                                            |
| Safety                | <ul style="list-style-type: none"> <li>• UL Safety: UL62368-1, 3rd Ed., (cULus)</li> <li>• Test prcedure: CB Scheme</li> <li>• Standard: IEC 62368-1:2018</li> </ul>                                                              |

## Exports And Tariff Codes

|           |              |
|-----------|--------------|
| ECCN      | 5A992.c      |
| HTS       | 8471.50.0150 |
| ScheduleB | 84.71        |

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