

CS-119/P1001 Series

19" TFT-LCD Sunlight Readable Touch Panel PC with Intel® Atom™ E3845 Quad Core Processor



POWER EFFICIENT SUNLIGHT READABLE PANEL PC

| CS-100/P1000 Series |

Overview

[CONTACT](#)

CS-100/P1001 Series is a 8.4" - 24" TFT-LCD sunlight readable touch panel PC offering 1,500 nits - 1,800 nits ultra high brightness and 800 x 600 - 1920 x 1080 resolution. The system is equipped with Intel® Atom® E3845 processor and provides extensive I/O including 2x GbE, 4x USB, 2x RS232/422/485, 4x DI/4x DO, 1x VGA and 1x DisplayPort. It also supports 1x Mini-PCIe slot and 1x SIM socket for a variety of wireless connections, such as BT/WiFi and 3G/LTE. In addition, there are 2 types of storage devices including 2.5" SATA HDD and CFast. The accessible design of these storage devices allows quick data access and easy maintenance. CS-100/P1001 Series supports Convertible Display System (CDS) technology. Comparing to regular standalone panel PCs, it can lower maintenance cost and reduce unplanned downtime. Furthermore, CS-100/P1001 Series is a truly rugged display system supporting wide range operating temperature, IP65 dust/water proof front panel, wide range DC power input (9 to 48VDC) and rigorous industrial protections.

Key Features

- 19" TFT SXGA 5:4 LCD with Resistive 5-wire Touch, P-Cap. Touch, or Glass Only
- Designed with Aluminum Die-Casting Front Frame
- Onboard Intel® Atom™ E3845 Processor Quad Core, 1.91GHz
- 1x DDR3L SO-DIMM max. up to 4GB
- 1x 2.5" SATA HDD Bay, 1x CFast Card and 1x SIM Card Socket
- 2x LAN, 4x USB, 2x COM, 1x VGA, 1x DisplayPort, 4x DI/4x DO
- 1x Mini-PCIe Expansion Socket
- IP 65 Compliant Front Panel
- Supports Panel / VESA / Rack Mounting
- Convertible Display System (CDS) Supported
- Built-in Two 2W Internal Speakers
- 2x Universal I/O Brackets(For P1001E only)

Certifications



Sunlight Readable

Providing ultra high brightness 1,500 nits - 1,800 nits and resolution up to 800 x 600 - 1920 x 1080 (XGA), CS-100/P1000 Series is suitable for all lighting conditions including direct sunlight.



Wide Temperature

CS-100/P1000 Series supports wide range operating temperature and is suitable for deploying in extreme and harsh environments.

Multiple Functions

CS-100/P1000 Series provides extensive I/O, Mini-PCIe slot, 2.5" SATA drive bay, CFast socket, and SIM card slot.



CS-119 Specifications

| Model Name | CS-119 |
|-------------------------|---|
| Display | |
| LCD Size | • 19" (5:4) |
| Max. Resolution | • 1280 x 1024 (SXGA) |
| Brightness (cd/m2) | • 1600 |
| Contrast Ratio | • 1000 : 1 |
| LCD Color | • 16.7M |
| Pixel Pitch (mm) | • 0.294 (H) x 0.294 (V) |
| Viewing Angle (H-V) | • 170 / 160 |
| Backlight LED Life Time | • 50,000 hrs (LED Backlight) |
| Touch Screen | |
| Touch Type | • Projected Capacitive |
| Physical | |
| Dimension (W x D x H) | • 510 x 389.3 x 63.2 mm |
| Weight Information | • 6.96 kg |
| Mechanical Construction | • Flat Rugged Aluminum Die-casting Bezel |
| Power | |
| Power Consumption | • 44.45W (Max.) |
| Environment | |
| Front Panel Protection | • IP 65 Compliant |
| Operating Temperature | • -20°C to 70°C (With Industrial Grade Peripherals; Ambient with air flow) |
| Storage Temperature | • -30°C to 70°C |
| Relative Humidity | • 90% RH @ 40°C (Non-condensing) |
| EMC | • CE, UKCA, FCC, ICES-003 Class A |
| EMI | <ul style="list-style-type: none"> • CISPR 32 Conducted & Radiated: Class A • EN/BS EN 55032 Conducted & Radiated: Class A • EN/BS EN IEC 61000-3-2 Harmonic current emissions: Class A • EN/BS EN61000-3-3 Voltage fluctuations & flicker • FCC 47 CFR Part 15B, ICES-003 Conducted & Radiated: Class A |
| EMS | <ul style="list-style-type: none"> • EN/IEC 61000-4-2 ESD: Contact: 4 kV; Air: 8 kV • EN/IEC 61000-4-3 RS: 80 MHz to 1000 MHz: 3 V/m • EN/IEC 61000-4-4 EFT: AC Power: 1 kV; DC Power: 0.5 kV; Signal: 0.5 kV • EN/IEC 61000-4-5 Surges: AC Power: 2 kV; Signal: 1 kV • EN/IEC 61000-4-6 CS: 3V • EN/IEC 61000-4-8 PFMF: 50 Hz, 1A/m • EN/IEC 61000-4-11 Voltage Dips & Voltage Interruptions: 0.5 cycles at 50 Hz |
| Safety | • UL, cUL, CB, IEC, EN 62368-1 |

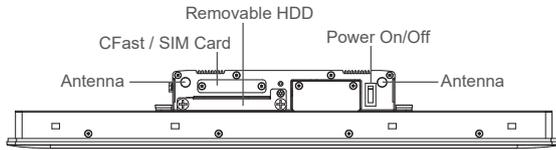
P1001 Series Specifications

| Model Name | P1001 | P1001E |
|---|---|--|
| System | | |
| Processor | <ul style="list-style-type: none"> Onboard Intel® Atom™ Processor E3845 Quad Core, 1.91 GHz | |
| Memory | <ul style="list-style-type: none"> 1x DDR3L 1066/1333 MHz SO-DIMM Socket (un-buffered and non-ECC) Support up to 8 GB | |
| BIOS | <ul style="list-style-type: none"> AMI 64Mbit SPI BIOS | |
| Graphics | | |
| CDS (Convertible Display System) Technology | <ul style="list-style-type: none"> 1x Convertible Display System (CDS) Interface | |
| VGA | <ul style="list-style-type: none"> 1x VGA Connector (1920x1080@60Hz) | |
| DP | <ul style="list-style-type: none"> 1x DisplayPort Connector (1920x1080@60Hz) | |
| Audio | | |
| Line-out | <ul style="list-style-type: none"> 1x Line-out, Phone Jack 3.5mm | |
| Mic-in | <ul style="list-style-type: none"> 1x Mic-in, Phone Jack 3.5mm | |
| I/O | | |
| LAN | <ul style="list-style-type: none"> 2x GbE LAN (Supports WoL, Teaming, Jumbo Frame & PXE), RJ45 <ul style="list-style-type: none"> GbE1: Intel® I210 GbE2: Intel® I210 | |
| USB | <ul style="list-style-type: none"> 1x USB 3.2 Gen1 (Type A), 3x USB 2.0 (Type A) | |
| Serial Port | <ul style="list-style-type: none"> 2x RS-232/422/485 with Auto Flow Control Support, DB9 | |
| DIO | <ul style="list-style-type: none"> 8x Isolated Digital I/O (4in/4out) | |
| Storage | | |
| SSD/HDD | <ul style="list-style-type: none"> 1x 2.5" HDD/SSD Drive | |
| SIM Card | <ul style="list-style-type: none"> 1x Front Accessible SIM Socket | |
| CFast | <ul style="list-style-type: none"> 1x Front Accessible CFast Socket | |
| Expansion | | |
| Mini PCI Express | <ul style="list-style-type: none"> 1x Full-size Mini-PCIe Socket for Wi-Fi/GSM/Expansion Module | |
| Universal Bracket | | <ul style="list-style-type: none"> 2x Universal I/O Bracket |
| Other Function | | |
| Watchdog Timer | <ul style="list-style-type: none"> Software Programmable Supports 256 Levels System Reset | |
| Internal Speaker | <ul style="list-style-type: none"> AMP 2W + 2W | |
| OSD Function | <ul style="list-style-type: none"> LCD On/Off, Brightness Up, Brightness Down | |
| Reset Button | <ul style="list-style-type: none"> 1x Reset Button | |
| Power | | |
| Power Button | <ul style="list-style-type: none"> 1x ATX Power On/Off Switch | |
| Power Mode Switch | <ul style="list-style-type: none"> 1x AT/ATX Mode Switch | |
| Power Input | <ul style="list-style-type: none"> 1x 3-pin Terminal Block Connector with Power Input 9~48VDC | |
| Power Adapter (Optional) | <ul style="list-style-type: none"> 1x Optional AC/DC 12V/5A, 60W | |

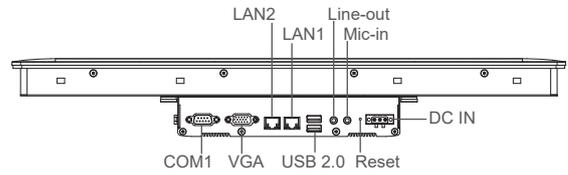
| Physical | | |
|-------------------------------------|---|-----------------------|
| Dimension (W x D x H) | • 204.5 x 149 x 37.5 mm | • 204.5 x 150 x 60 mm |
| Weight Information | • 1.34kg | • 1.54kg |
| Mechanical Construction | • Extruded Aluminum with Heavy Duty Metal | |
| Mounting | • Wall / VESA / CDS Mounting | |
| Physical Design | • Fanless Design • Jumper-less Design | |
| Reliability & Protection | | |
| Reverse Power Input | • Yes | |
| Over Voltage Protection | • Protection Range: 51~58V • Protection Type: shut down operating voltage, re-power on at the present level to recover | |
| Over Current Protection | • 20A | |
| Operating System | | |
| Microsoft® Windows® | • Windows® 10, Windows® 8, Windows® 7 • Windows® Embedded 8 Standard, Windows® Embedded Standard 7 | |
| Linux | • Supports by project | |
| Environment | | |
| Operating Temperature | • Ambient with Air Flow: -20°C to 70°C (with Industrial Grade Peripherals) | |
| Storage Temperature | • -30°C to 85°C | |
| Relative humidity | • 10%~95% RH (Non-condensing) | |
| Shock | • Operating, 15 Grms, Half-sine 11 ms Duration (w/ SSD, according to IEC60068-2-27) | |
| Vibration | • Operating, 1 Grms, 5-500 Hz, 3 Axes (w/ SSD, according to IEC60068-2-64) | |
| EMC | • CE, UKCA, FCC, ICES-003 Class A | |
| EMI | • CISPR 32 Conducted & Radiated: Class A • EN/BS EN 55032 Conducted & Radiated: Class A • EN/BS EN IEC 61000-3-2 Harmonic current emissions: Class A • EN/BS EN61000-3-3 Voltage fluctuations & flicker • FCC 47 CFR Part 15B, ICES-003 Conducted & Radiated: Class A | |
| EMS | • EN/IEC 61000-4-2 ESD: Contact: 4 kV; Air: 8 kV • EN/IEC 61000-4-3 RS: 80 MHz to 1000 MHz: 3 V/m • EN/IEC 61000-4-4 EFT: AC Power: 1 kV; DC Power: 0.5 kV; Signal: 0.5 kV • EN/IEC 61000-4-5 Surges: AC Power: 2 kV; Signal: 1 kV • EN/IEC 61000-4-6 CS: 3V • EN/IEC 61000-4-8 PFMF: 50 Hz, 1A/m • EN/IEC 61000-4-11 Voltage Dips & Voltage Interruptions: 0.5 cycles at 50 Hz | |

CS-119/P1001 External Layout

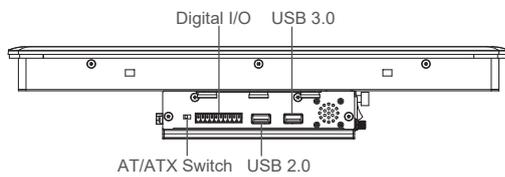
Front I/O



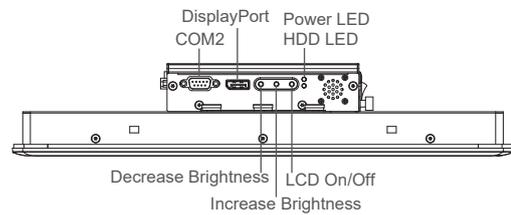
Rear I/O



Left I/O

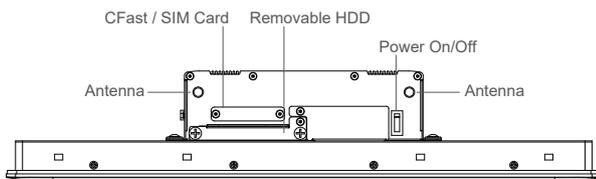


Right I/O

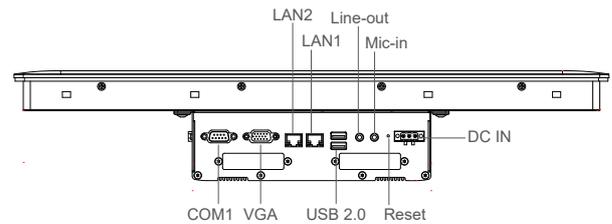


CS-119/P1001E External Layout

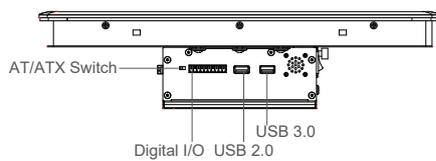
Front I/O



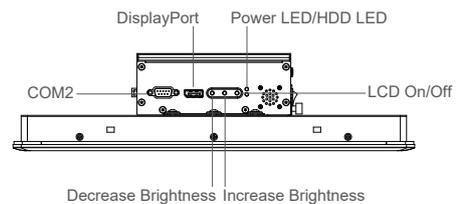
Rear I/O



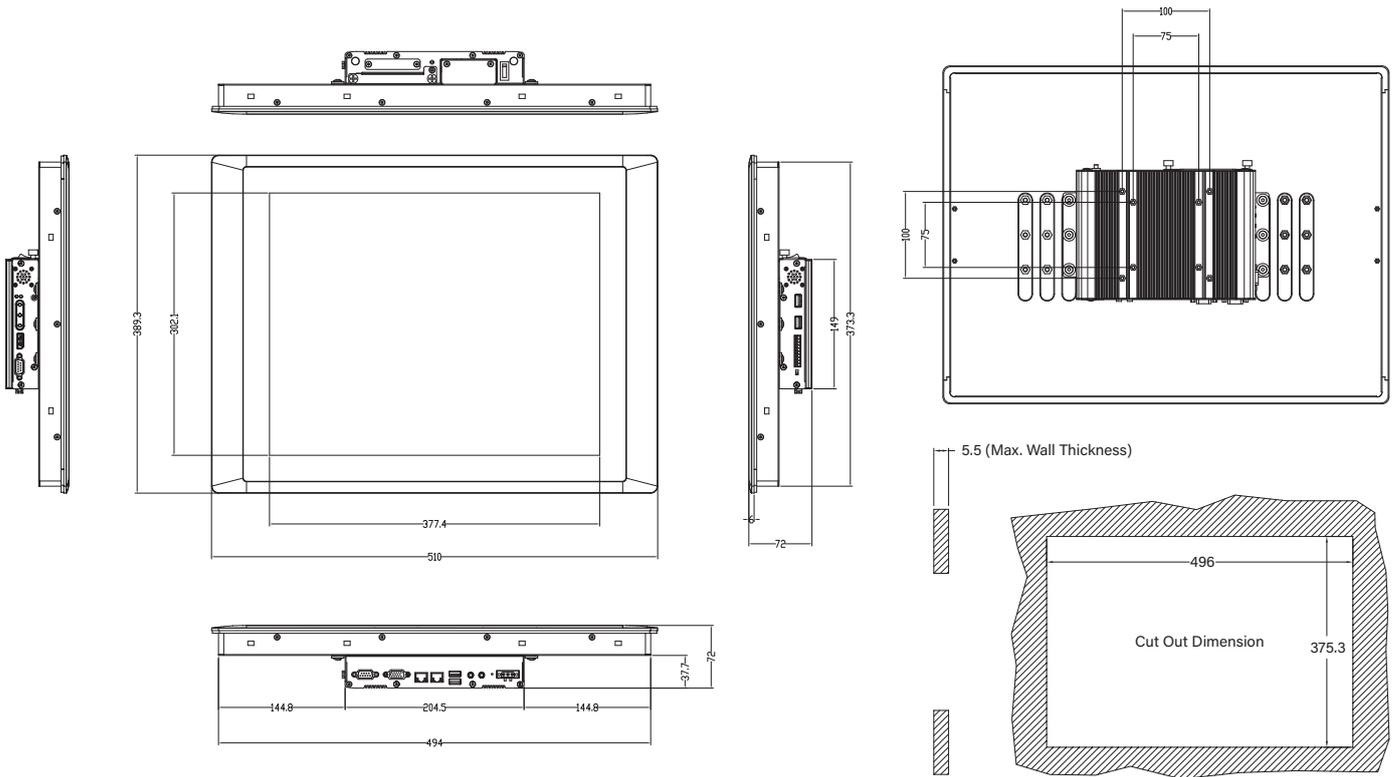
Left I/O



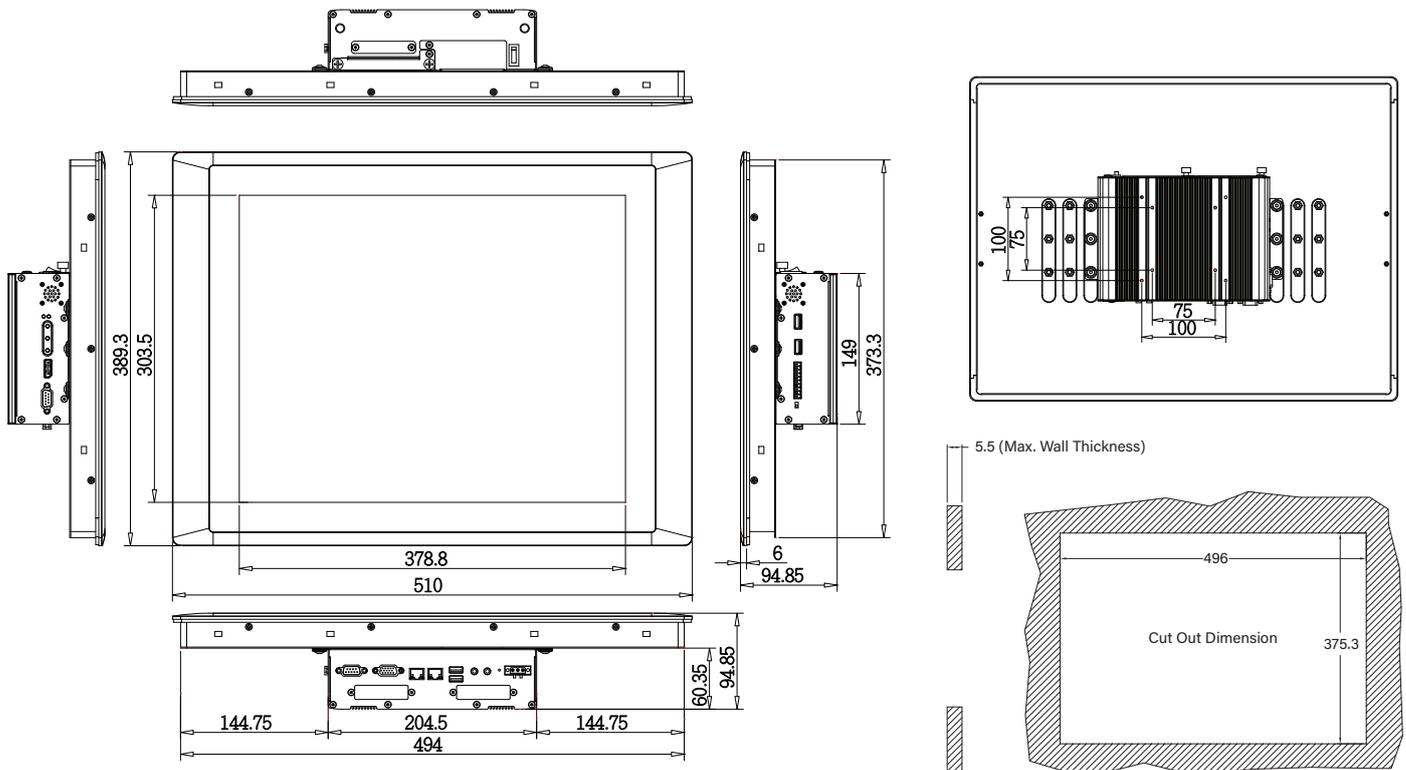
Right I/O



CS-119/P1001 Dimensions



CS-119/P1001E Dimensions



Ordering Information

Available Models

| Model No. | Description |
|------------------------|---|
| CS-119C-R11/P1001-R10 | 19" TFT-LCD 1600 nits Sunlight Readable Touch Panel PC with Intel® Atom™ E3845 Quad Core Processor and P-Cap. Touch |
| CS-119C-R11/P1001E-R10 | 19" TFT-LCD 1600 nits Sunlight Readable Touch Panel PC with Intel® Atom™ E3845 Quad Core Processor, P-Cap. Touch and 2x Universal I/O Bracket |

Model Configuration

| | CS-119C | P1001 | P1001E |
|----------------|---------|-------|--------|
| CS-119C/P1001 | V | V | -- |
| CS-119C/P1001E | V | -- | V |

V : Compatible

Package Checklist

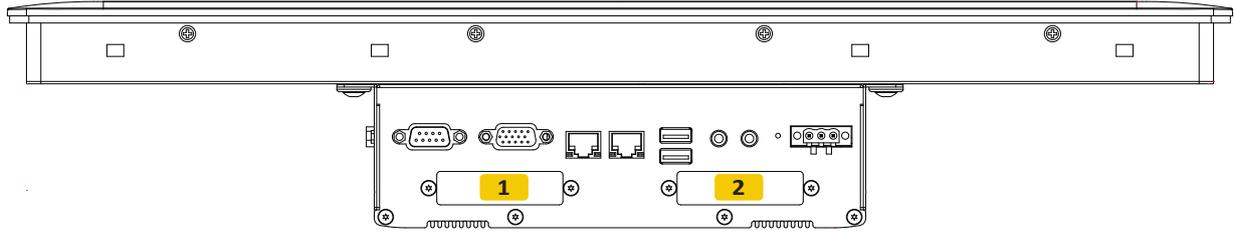
| | |
|---|---|
| • CS-119/P1001 Series Panel PC x 1 | • Power Terminal Block Connector (Female) x 1 |
| • Panel Mounting Kit x 1 | • HDD Screw Pack x 1 |
| • DIO Terminal Block Connector (Female) x 1 | • Mini PCIe Screw Pack x 1 |

Optional Modules and Accessories

| Model No. | Description |
|------------------|---|
| MEC-COM-M212-DB9 | Mini-PCIe Module with 2x COM Ports, 1x Standard DB9 Cable (For P1001E only) |
| MEC-LAN-M102-30 | Mini-PCIe Module with 2x LAN Ports, 2x 30cm cable (For P1001E only) |
| MEC-USB-M102-30 | Mini-PCIe Module with 2x USB 3.2 Gen1 Ports, 1x 30cm cable (For P1001E only) |
| UB0303 | 2x Universal Bracket each with 1x DB9 Cutout (For P1001E only) |
| UB0311 | 1x Universal Bracket with 2x RJ45 Cutout (For P1001E only) |
| UB0314 | 1x Universal Bracket with 2x USB Cutout (For P1001E only) |
| URM01 | Universal 19" Rack Mount Kit for Industrial Panel PC & Industrial Monitor |
| GST60A12-CIN1 | Adapter AC/DC 12V 5A 60W, GST60A12-CIN1, wide temp (-30°C ~ +70°C) |
| SL2-SL3 | US 2 heads power cord, US B type to IEC C13, SVT 18AWG/3C Black 1.8M SL-2+SL-3 |
| SL6-SL3 | EU 2 heads power cord, EU G type to IEC C13, H05VV-F 0.75mm2/3G Black 1.8M SL-6+SL-3 |
| QP026-SL3 | UK 2 heads power cord, UK I type to IEC C13, H05VV-F 0.75mm2/3G Black 1.8M QP026+SL-3 |

Optional Module Configuration (For P1001E only)

Optional Module Configuration (For P1001E only)



| Model No. | Description | 1 | 2 |
|--|---|---|---|
|  <p>MEC-COM-M212-DB9/UB0303</p> | Mini-PCIe Module with 2x COM Ports, 1x Standard DB9 Cable, 2x Universal Bracket each with 1x DB9 Cutout | V | V |
|  <p>MEC-LAN-M102-30/UB0311</p> | Mini-PCIe Module with 2x LAN Ports, 2x 30cm cable, w/ 1x Universal Bracket with 2x RJ45 Cutout | V | V |
|  <p>MEC-USB-M102-30/UB0314</p> | Mini-PCIe Module with 2x USB 3.2 Gen1 Ports, 1x 30cm cable, 1x Universal Bracket with 2x USB Cutout | V | V |

V : Compatible