# CO-W121C/P1101 Series

21.5" TFT Full HD 16:9 Panel PC with Intel® Atom® / Pentium® Processor



## **ALL-NEW** OPEN FRAME PANEL PC

CO-100/P1101 Series Fits Any Machine Perfectly

### Overview



Cincoze power efficient open frame modular panel PCs (CO-W121C/P1101 Series) support Intel® Atom® and Pentium® processors, and multiple displays. Native I/O ports include LAN, USB, COM, and DIO, and the series supports CFM technology, offering expansion functions such as Power Ignition Sensing (IGN) to meet different application needs. The integrated structure, exclusive adjustable mounting bracket, and support for various mounting methods enable a perfect fit in cabinets of different materials and thicknesses. The robust design also meets the application needs of harsh industrial environments.

#### **Key Features**

- 21.5" TFT-LCD with Projected Capacitive Touch
- Onboard Intel® Atom® / Pentium® Processor
- 1x DDR3L SO-DIMM max. up to 8GB
- Designed with Adjustable Mounting Bracket
- Support Flat / Standard / VESA / Rack Mount
- Front Panel IP65 Compliant
- Wide Operating Temperature
- Cincoze Patent CDS Technology Support

#### Certifications











### Power Efficient & Multi-Display

Powered by Intel® Atom® or Pentium® processor with support for multiple displays.







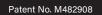


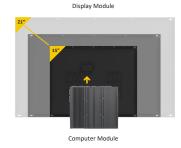
### Rich I/O for Flexible Expansion

Native I/O ports include LAN, USB, COM, DIO, Mini-PCIe, and SIM slot, while the whole series supports CFM technology for additional expansion functions like Power Ignition Sensing (IGN) or Power over Ethernet (PoE) to meet different application needs.

### Patented CDS Technology

The patented CDS (Convertible Display System) technology makes maintenance easy and offers flexibility for future upgrades. To upgrade the panel size, replace the display module, or to upgrade the system performance, replace the computer module.







### Flexible Design and Easy Installation

Exclusive adjustable mounting bracket with thickness adjustment setting and two panel-locking methods (panel or boss type) make modular panel PC easier and more convenient to integrate into industrial machinery.

Patent No.: D224544, D224545, I802427

### **Integrated Structure**

As standard, the open frame modular panel pc can be deployed in equipment machines, but remove the mounting bracket and it becomes a standalone panel pc for use with a VESA mount or in a 19" rack.





### Strong, Reliable and Durable

Meets the requirements for HMI applications in harsh industrial environments: IP65 waterproof and dustproof front panel, fanless, wide temperature (0–60°C), and wide voltage (9–48 VDC).







## CO-W121C Specifications

Model Name	CO-W121C
Display	
LCD Size	• 21.5" (16:9)
Resolution	• 1920 x 1080
Brightness	• 300 cd/m2
Contract Ratio	• 5000 : 1
LCD Color	• 16.7M
Pixel Pitch	• 0.24825 (H) x 0.24825 (V) mm
Viewing Angle	• 178 (H) / 178 (V)
Backlight MTBF	• 50,000 hrs
Touch Screen	
Touchscreen Type	Projected Capacitive Touch
Physical	
Dimension (W x D x H)	• 550 x 343.7 x 63.3
Weight	• 7.16 kg
Construction	One-piece and Slim Bezel Design
Mounting Type	• Flat / Standard / VESA / Rack Mount
Mounting Bracket	Pre-installed Mounting Bracket with Adjustable Design ( Support 11 different stages of adjustment )
Protection	
Ingress Protection	Front Panel IP65 Compliant * According to IEC60529
Environment	
Operating Temperature	Ambient with Air flow: 0°C to 60°C (with Industrial Grade Peripherals)
Storage Temperature	• -20°C to 60°C
Humidity	• 80% RH @ 50°C (Non-condensing)
EMC	• CE, UKCA, FCC, ICES-003 Class A
ЕМІ	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> <li>EN/IEC 61000-4-2 ESD: Contact: 4 kV; Air: 8 kV</li> <li>EN/IEC 61000-4-3 RS: 80 MHz to 1000 MHz: 3 V/m</li> <li>EN/IEC 61000-4-4 EFT: AC Power: 1 kV; DC Power: 0.5 kV; Signal: 0.5 kV</li> <li>EN/IEC 61000-4-5 Surges: AC Power: 2 kV; Signal: 1 kV</li> <li>EN/IEC 61000-4-6 CS: 3V</li> <li>EN/IEC 61000-4-8 PFMF: 50 Hz, 1A/m</li> <li>EN/IEC 61000-4-11 Voltage Dips &amp; Voltage Interruptions: 0.5 cycles at 50 Hz</li> </ul>
Safety	• UL, cUL, CB, IEC, EN 62368-1



## **P1101 Series Specifications**

Model Name	P1101	
System		
Processor	Onboard Intel® Atom® x7-E3950 Quad Core Processor, up to 2.00 GHz Onboard Intel® Pentium® N4200 Quad Core Processor, up to 2.50 GHz	
Memory	• 1x DDR3L 1333/1600/1866 MHz 204-Pin SO-DIMM Socket • Supports up to 8GB (un-buffered and non-ECC)	
Graphics		
Graphics Engine	Integrated Intel® HD Graphics 505	
Maximum Display Output	Supports Triple Independent Display	
CDS (Convertible Display System) Technology	• 1x Convertible Display System (CDS) Interface	
VGA	• 1x VGA (1920 x 1200 @60Hz)	
DP	• 1x DisplayPort (4K x 2K @60Hz)	
Audio		
Audio Codec	Realtek® ALC888, High Definition Audio	
Line-out	• 1x Line-out, Phone Jack 3.5mm	
Mic-in	• 1x Mic-in, Phone Jack 3.5mm	
1/0		
LAN	• 2x GbE LAN (Supports WoL, Teaming, Jumbo Frame & PXE), RJ45 - GbE1: Intel® I210 - GbE2: Intel® I210	
USB	• 4x USB 3.2 Gen1 (Type A)	
Serial Port	• 4x RS-232/422/485 with Auto Flow Control Support 5V/12V, DB9	
DIO	8x Isolated Digital I/O (4in/4out), 10-Pin Terminal Block	
Storage		
SSD/HDD	• 1x 2.5"SATA HDD Bay (SATA 3.0)	
SIM Socket	•1x SIM Socket	
mSATA	• 1x mSATA Socket (SATA 3.0, Shared by Mini-PCIe Socket)	
Expansion		
Mini PCI Express	• 2x Full-size Mini-PCle Socket	
CFM (Control Function Module) Interface	Optional CFM IGN Module for Power Ignition Function     Optional CFM PoE Module for Power over Ethernet Function	
CDS (Convertible Display System) Technology	1x Convertible Display System (CDS) Interface	
Antenna Holes	• 4x Antenna Holes	
Other Function		
Instant Reboot	• Support 0.2sec	
Watchdog Timer	Software Programmable Supports 256 Levels System Reset	
Internal Speaker	• AMP 2W + 2W	



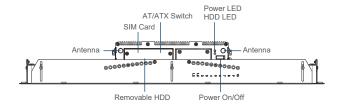
OSD Function         LCD CN (OTL Brightness Down           Clear CNOS Switch         Ix Reset Button           Power           Power Switch         Ix Reset Button           Power Switch         Ix Power Switch           Power Mode Switch         Ix Power Switch           Power Mode Switch         Ix Power Switch           Power Mode Switch         Ix ACT/ATX Mode Switch           Power Mode Switch         Ix Cyptional AC/ISC 129/Joh 0000 or 249/Joh 12000           Power Adapter (Optional)         Ix Optional AC/ISC 129/Joh 0000 or 249/Joh 12000           Proper Injust         Ix Optional AC/ISC 129/Joh 0000 or 249/Joh 12000           Physical Design         Ix Optional AC/ISC 129/Joh 0000 or 249/Joh 12000           Meshanical Construction         Ix Estatuted Aluminum with Heavy Duty Metal           Physical Design         Ix Partices Design           Mounting         Ix Partices Design           Mounting         Ix Partices Design           Mounting         Ix Partices Design           Mounting         Ix Partices Design           Projection Types that down operating voltage, re-power on at the present fewel to recover           Over Current Production         Ix Projection Types that down operating voltage, re-power on at the present fewel to recover           Operating System         Ix Times 249/417 hours<			
Power Switch	OSD Function	LCD On/Off, Brightness Up, Brightness Down	
Power Switch 1st Power Switch 1st Power Switch 1st Power Switch 1st Power Mode Switch 1st Power Input Island Input I	Clear CMOS Switch	1x Clear CMOS Switch	
Power Mitch Power Mitch Power Mitch Power Input Power Adapter (Optional) Power On/Off Power Adapter (Optional) Power On/Off Powe	Reset Button	1x Reset Button	
Power Input	Power		
Power Input	Power Switch	• 1x Power Switch	
Power Adapter (Optional)  - ix Remote Power On/Off - ix Remote Power On/Off Connector, 2-pin Terminal Block  Physical  Dimension (W x D x H) - 2045 x 149 x 41.5 mm  Weight Information - 149kg  Mechanical Construction - Extruded Aluminum with Heavy Duty Metal  Physical Design - Jumper-less Design - Protection Range: 51-58V - Protection Protection - Protection Range: 51-58V - Protection Type: shuf down operating voltage, re-power on at the present level to recover  Over Current Protection - 15A  CMOS Battery Backup - Super-Cap Integrated for CMOS Battery Maintenance-free Operation  MTBF - Time: 294,617 hours  Operating System  Microsoft Windows* - Windows*10  Linux - Supports by project  Environment  Operating Temperature - Ambient with Air Flow: -40°C to 70°C (with Extended Temperature Peripherals)  Storage Temperature - Antibient with Air Flow: -40°C to 70°C (with Extended Temperature Peripherals)  Storage Temperature - 295 RH @ 75°C (Non-condensing)  Shock - Operating, 5 Grms, 141f-sine 11 ms Duration (w/ SSD, according to IEC60068-2-27)  Vibration - Operating, 5 Grms, 5-500 Itz, 3 Axes (w/ SSD, according to IEC60068-2-27)  Vibration - CEL UKCA, F.CC, CES-003 Conducted & Radiated: Class A Flows Schools of History - EN/SE NILEG (50000-3-2) Harmonic current emissions: Class A Flows Schools Schools of History - EN/SE NILEG (50000-3-2) Harmonic current emissions: Class A Flows - EN/SE NILEG (50000-3-2) Harmonic current emissions: Class A Flows - EN/SE NILEG	Power Mode Switch	• 1x AT/ATX Mode Switch	
### Remote Power On/Off Connector, 2-pin Terminal Block    Physical	Power Input	• 1x 3-pin Terminal Block Connector with Power Input 9~48VDC	
Physical  Dimension ( W x D x H )	Power Adapter (Optional)	• 1x Optional AC/DC 12V/5A 60W or 24V/5A 120W	
Microsoft Windows**   Windows***   Windows**   Windows*   Windo	Remote Power On/Off	• 1x Remote Power On/Off Connector, 2-pin Terminal Block	
Weight Information         - 1.49 kg           Mechanical Construction         - Extruded Aluminum with Heavy Duty Metal           Physical Design         - Fanhass Design - Jumper-less Design           Mounting         - Wall / VESA / CDS / DIN Mounting           Reliability & Protection         - 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         - 15A           CMOS Battery Backup         - Super-Cap Integrated for CMOS Battery Maintenance-free Operation           MTBF         - Time: 294,817 hours           Operating System           Microsoft* Windows*         - Windows*10           Linux         - Supports by project           Environment           Operating Temperature         - Ambient with Air Flow: -40°C to 70°C (with Extended Temperature Peripherals)           Storage Temperature         - 40°C to 85°C           Relative humidity         - 99% RH @ 75°C (Non-condensing)           Shock         - Operating, 50 Grms, Half-sine 11 ms Duration (w/ SSD, according to IEC60068-2-27)           Vibration         - Operating, 50 Grms, 45-500 Hz, 3 Axes (w/ SSD, according to IEC60068-2-27)           Vibration         - CE, UKCA, FCC, ICES-003 Class A - EN/JSS EN 150332 Conducted & Radiated: Class A - EN	Physical		
Physical Design   Fantess Design   Jumper-less De	Dimension ( W x D x H )	• 204.5 x 149 x 41.5 mm	
Physical Design	Weight Information	• 1.49kg	
Jumper-less Design     Mounting   -Wall / VESA / CDS / DIN Mounting     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   -15A     CMOS Battery Backup   -SuperCap Integrated for CMOS Battery Maintenance-free Operation     MTBF   -Time: 294,617 hours     Operating System     Microsoft* Windows*   -Windows*10     Linux   -Supports by project     Environment     Operating Temperature   -Ambient with Air Flow: -40°C to 70°C (with Extended Temperature Peripherals)     Storage Temperature   -40°C to 85°C     Relative humidity   -95% RH @ 75°C (Non-condensing)     Shock   -Operating, 5 Grms, 148f-sine 11 ms Duration (w/ SSD, according to IEC60068-2-27)     Vibration   -CE, UKCA, FCC, ICES-003 Class A   EN/BS EN IEC6 61000-3-2 Harmonic current emissions: Class A   EN/BS EN IEC6 61000-3-2 Harmonic current emissions: Class A   EN/BS EN IEC6 61000-3-2 Harmonic current emissions: Class A   EN/BS EN IEC6 61000-3-2 Harmonic current emissions: Class A   EN/BS EN IEC6 61000-3-2 Harmonic current emissions: Class A   EN/BS EN IEC6 61000-3-2 Harmonic current emissions: Class A   EN/BS EN IEC6 61000-3-2 Harmonic current emissions: Class A   EN/BS EN IEC6 61000-3-2 Harmonic current emissions: Class A   EN/BS EN IEC6 61000-3-2 Harmonic current emissions: Class A   EN/BS EN IEC6 61000-3-2 Harmonic current emissions: Class A   EN/BS EN IEC6 61000-3-2 Harmonic current emissions: Class A   EN/BS EN IEC6 61000-3-2 Harmonic current emissions: Class A   EN/BS EN IEC6 61000-3-2 Harmonic current emissions: Class A   EN/BS EN IEC6 61000-3-2 Harmonic current emissions: Class A   EN/BS EN IEC6 61000-3-2 Harmonic current emissions: Class A   EN/BS EN IEC6 61000-3-2 Harmonic current emissions: Class A   EN/BS EN IEC6 61000-3-2 Harmonic current emissions: Class A   EN/BS EN IEC6 61000-3-2 Harmonic current emissions: Class A   EN/BS EN IEC6 61000-3-2 Harmonic curre	Mechanical Construction	Extruded Aluminum with Heavy Duty Metal	
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  15A  CMOS Battery Backup  SuperCap Integrated for CMOS Battery Maintenance-free Operation  MTBF  Time: 294,617 hours  Operating System  Microsoft* Windows*  Windows*10  Linux  Supports by project  Environment  Operating Temperature  Ambient with Air Flow: -40°C to 70°C (with Extended Temperature Peripherals)  Storage Temperature  -40°C to 85°C  Relative humidity  959% RH @ 75°C (Non-condensing)  Shock  Operating, 50 Grms, Half-sine 11 ms Duration (w/ SSD, according to IEC60068-2-27)  Vibration  Operating, 5 Grms, 5-500 Hz, 3 Axes (w/ SSD, according to IEC60068-2-64)  EMC  -CE, UKCA, FCC, ICES-003 Class A -EN/BS EN 15C0 32 Conducted & Radiated: Class A -EN/BS EN 15C0 32 Conducted & Radiated: Class A -EN/BS EN 15C0 61000-32 Harmonic current emissions: Class A -EN/BS EN 15C0 61000-32 Harmonic current emissions: Class A -EN/BS EN 15C0 61000-32 Harmonic current emissions: Class A -EN/BS EN 15C0 61000-32 Harmonic current emissions: Class A -EN/BS EN 15C0 61000-32 Harmonic current emissions: Class A -EN/BS EN 15C0 61000-32 Harmonic current emissions: Class A -EN/BS EN 15C0 61000-32 Harmonic current emissions: Class A -EN/BS EN 15C0 61000-32 Harmonic current emissions: Class A -EN/BS EN 15C0 61000-32 Harmonic current emissions: Class A -EN/BS EN 15C0 61000-32 Harmonic current emissions: Class A -EN/BS EN 15C0 61000-32 Harmonic current emissions: Class A -EN/BS EN 15C0 61000-32 Harmonic current emissions: Class A -EN/BS EN 15C0 61000-32 Harmonic current emissions: Class A	Physical Design		
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 - 15A  CMOS Battery Backup - SuperCap Integrated for CMOS Battery Maintenance-free Operation  MTBF - Time: 294,617 hours  Operating System  Microsoft* Windows* - Windows*10 - Supports by project  Environment  Operating Temperature - Ambient with Air Flow: -40°C to 70°C (with Extended Temperature Peripherals)  Storage Temperature40°C to 85°C  Relative humidity - 95% RH @ 75°C (Non-condensing)  Shock - Operating, 5 Grms, Half-sine 11 ms Duration (w/ SSD, according to IEC60068-2-27)  Vibration - Operating, 5 Grms, 5-500 Hz, 3 Axes (w/ SSD, according to IEC60068-2-64)  EMC - CE, UKCA, FCC, ICES-003 Class A - EN/BS EN IEC 61000-3-2 Harmonic current emissions: Class A - EN/BS EN IEC 61000-3-2 Harmonic current emissions: Class A - EN/BS EN IEC 61000-3-2 Harmonic current emissions: Class A - EN/BS EN IEC 61000-3-2 Harmonic current emissions: Class A - EN/BS EN IEC 61000-3-2 Harmonic current emissions: Class A - EN/BS EN IEC 61000-3-2 Harmonic current emissions: Class A - EN/BS EN IEC 61000-3-2 Harmonic current emissions: Class A - EN/BS EN IEC 61000-3-2 Harmonic current emissions: Class A - EN/BS EN IEC 61000-3-2 Harmonic current emissions: Class A - EN/BS EN IEC 61000-3-2 Harmonic current emissions: Class A - EN/BS EN IEC 61000-3-2 Harmonic current emissions: Class A - EN/BS EN IEC 61000-3-2 Harmonic current emissions: Class A	Mounting	Wall / VESA / CDS / DIN Mounting	
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 15A  CMOS Battery Backup Super-Cap Integrated for CMOS Battery Maintenance-free Operation  MTBF Time: 294,617 hours  Operating System  Microsoft* Windows* Windows*10  Linux Supports by project  Environment  Operating Temperature Ambient with Air Flow: -40°C to 70°C (with Extended Temperature Peripherals)  Storage Temperature -40°C to 85°C  Relative humidity 95% RH @ 75°C (Non-condensing)  Shock Operating, 5 Grms, Half-sine 11 ms Duration (w/ SSD, according to IEC60068-2-27)  Vibration Operating, 5 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 IEC61003-3-2 Natronoic Current emissions: Class A -EN/BS EN IEC61003-3-3 Voltage fluctuations & flicker	Reliability & Protection		
Protection Type: shut down operating voltage, re-power on at the present level to recover  15A  CMOS Battery Backup	Reverse Power Input	• Yes	
CMOS Battery Backup  SuperCap Integrated for CMOS Battery Maintenance-free Operation  MTBF  Time: 294,617 hours  Operating System  Microsoft* Windows*  Windows*10  Linux  Supports by project  Environment  Operating Temperature  Ambient with Air Flow: -40°C to 70°C (with Extended Temperature Peripherals)  Storage Temperature  -40°C to 85°C  Relative humidity  95% RH @ 75°C (Non-condensing)  Shock  Operating, 50 Grms, Half-sine 11 ms Duration (w/ SSD, according to IEC60068-2-27)  Vibration  Operating, 5 Grms, 5-500 Hz, 3 Axes (w/ SSD, according to IEC60068-2-64)  EMC  -CE, UKCA, FCC, ICES-003 Class A  EM/BS EN 150032 Conducted & Radiated: Class A -EN/BS EN 15C032 Conducted & Radiated: Class A	Over Voltage Protection		
MTBF . Time: 294,617 hours  Operating System  Microsoft* Windows* . Windows*10  Linux . Supports by project  Environment  Operating Temperature . Ambient with Air Flow: -40°C to 70°C (with Extended Temperature Peripherals)  Storage Temperature40°C to 85°C  Relative humidity . 95% RH @ 75°C (Non-condensing)  Shock . Operating, 50 Grms, Half-sine 11 ms Duration (w/ SSD, according to IEC60068-2-27)  Vibration . Operating, 5 Grms, 5-500 Hz, 3 Axes (w/ SSD, according to IEC60068-2-64)  EMC . CE, UKCA, FCC, ICES-003 Class A  EN/IS EN 55032 Conducted & Radiated: Class A -EN/ISS EN 55032 Conducted & Radiated: Class A -EN/ISS EN IEC 61000-3-2 Harmonic current emissions: Class A -EN/ISS EN IEC 61000-3-3 Voltage fluctuations & flicker	Over Current Protection	• 15A	
Operating System  Microsoft* Windows*  - Windows*10  Linux  - Supports by project  Environment  Operating Temperature  - Ambient with Air Flow: -40°C to 70°C (with Extended Temperature Peripherals)  Storage Temperature  - 40°C to 85°C  Relative humidity  - 95% RH @ 75°C (Non-condensing)  Shock  - Operating, 50 Grms, Half-sine 11 ms Duration (w/ SSD, according to IEC60068-2-27)  Vibration  - Operating, 5 Grms, 5-500 Hz, 3 Axes (w/ SSD, according to IEC60068-2-64)  EMC  - CE, UKCA, FCC, ICES-003 Class A - EN/BS EN 55032 Conducted & Radiated: Class A - EN/BS EN 1EC 61000-3-2 Harmonic current emissions: Class A - EN/BS EN 1EC 61000-3-3 Voltage fluctuations & flicker	CMOS Battery Backup	SuperCap Integrated for CMOS Battery Maintenance-free Operation	
Microsoft* Windows*  Windows*10  Linux  Supports by project  Environment  Operating Temperature  Ambient with Air Flow: -40°C to 70°C (with Extended Temperature Peripherals)  Storage Temperature  -40°C to 85°C  Relative humidity  95% RH @ 75°C (Non-condensing)  Shock  Operating, 50 Grms, Half-sine 11 ms Duration (w/ SSD, according to IEC60068-2-27)  Vibration  Operating, 5 Grms, 5-500 Hz, 3 Axes (w/ SSD, according to IEC60068-2-64)  EMC  -CE, UKCA, FCC, ICES-003 Class A  -CISPR 32 Conducted & Radiated: Class A -EN/BS EN 55032 Conducted & Radiated: Class A -EN/BS EN 1EC 61000-3-2 Harmonic current emissions: Class A -EN/BS EN 1EC 61000-3-3 Voltage fluctuations & flicker	MTBF	• Time: 294,617 hours	
Linux  Supports by project  Environment  Operating Temperature  - Ambient with Air Flow: -40°C to 70°C (with Extended Temperature Peripherals)  Storage Temperature 40°C to 85°C  Relative humidity  - 95% RH @ 75°C (Non-condensing)  Shock  - Operating, 50 Grms, Half-sine 11 ms Duration (w/ SSD, according to IEC60068-2-27)  Vibration  - Operating, 5 Grms, 5-500 Hz, 3 Axes (w/ SSD, according to IEC60068-2-64)  EMC  - CE, UKCA, FCC, ICES-003 Class A  - EN/BS EN 55032 Conducted & Radiated: Class A  - EN/BS EN 1EC 61000-3-2 Harmonic current emissions: Class A  - EN/BS EN IEC 61000-3-3 Voltage fluctuations & flicker	Operating System		
Environment  Operating Temperature	Microsoft® Windows®	• Windows®10	
Operating Temperature  • Ambient with Air Flow: -40°C to 70°C (with Extended Temperature Peripherals)  • -40°C to 85°C  Relative humidity  • 95% RH @ 75°C (Non-condensing)  Shock  • Operating, 50 Grms, Half-sine 11 ms Duration (w/ SSD, according to IEC60068-2-27)  Vibration  • Operating, 5 Grms, 5-500 Hz, 3 Axes (w/ SSD, according to IEC60068-2-64)  EMC  • CE, UKCA, FCC, ICES-003 Class A  • EN/BS EN 55032 Conducted & Radiated: Class A  • EN/BS EN 55032 Conducted & Radiated: Class A  • EN/BS EN 1EC 61000-3-2 Harmonic current emissions: Class A  • EN/BS EN 61000-3-3 Voltage fluctuations & flicker	Linux	Supports by project	
Storage Temperature  - 40°C to 85°C  Relative humidity  - 95% RH @ 75°C (Non-condensing)  Shock  - Operating, 50 Grms, Half-sine 11 ms Duration (w/ SSD, according to IEC60068-2-27)  Vibration  - Operating, 5 Grms, 5-500 Hz, 3 Axes (w/ SSD, according to IEC60068-2-64)  EMC  - CE, UKCA, FCC, ICES-003 Class A  - EN/BS EN 55032 Conducted & Radiated: Class A - EN/BS EN 55032 Conducted & Radiated: Class A - EN/BS EN 1EC 61000-3-2 Harmonic current emissions: Class A - EN/BS EN 61000-3-3 Voltage fluctuations & flicker	Environment		
Relative humidity  • 95% RH @ 75°C (Non-condensing)  Shock  • Operating, 50 Grms, Half-sine 11 ms Duration (w/ SSD, according to IEC60068-2-27)  Vibration  • Operating, 5 Grms, 5-500 Hz, 3 Axes (w/ SSD, according to IEC60068-2-64)  EMC  • CE, UKCA, FCC, ICES-003 Class A  • 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	Operating Temperature	Ambient with Air Flow: -40°C to 70°C (with Extended Temperature Peripherals)	
Shock  Operating, 50 Grms, Half-sine 11 ms Duration (w/ SSD, according to IEC60068-2-27)  Operating, 5 Grms, 5-500 Hz, 3 Axes (w/ SSD, according to IEC60068-2-64)  EMC  CE, UKCA, FCC, ICES-003 Class A  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	Storage Temperature	• -40°C to 85°C	
Vibration  Operating, 5 Grms, 5-500 Hz, 3 Axes (w/ SSD, according to IEC60068-2-64)  EMC  CE, UKCA, FCC, ICES-003 Class A  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	Relative humidity	• 95% RH @ 75°C (Non-condensing)	
EMC  • CE, UKCA, FCC, ICES-003 Class A  • 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	Shock	Operating, 50 Grms, Half-sine 11 ms Duration (w/ SSD, according to IEC60068-2-27)	
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	Vibration	Operating, 5 Grms, 5-500 Hz, 3 Axes (w/ SSD, according to IEC60068-2-64)	
• 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	EMC	• CE, UKCA, FCC, ICES-003 Class A	
	EMI	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	



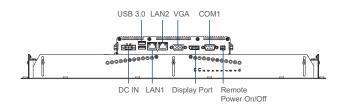
EMS	<ul> <li>EN/IEC 61000-4-2 ESD: Contact: 4 kV; Air: 8 kV</li> <li>EN/IEC 61000-4-3 RS: 80 MHz to 1000 MHz: 3 V/m</li> <li>EN/IEC 61000-4-4 EFT: AC Power: 1 kV; DC Power: 0.5 kV; Signal: 0.5 kV</li> <li>EN/IEC 61000-4-5 Surges: AC Power: 2 kV; Signal: 1 kV</li> <li>EN/IEC 61000-4-6 CS: 3V</li> <li>EN/IEC 61000-4-8 PFMF: 50 Hz, 1A/m</li> <li>EN/IEC 61000-4-11 Voltage Dips &amp; Voltage Interruptions: 0.5 cycles at 50 Hz</li> </ul>
Safety	• UL, cUL, CB, IEC, EN62368-1

## CO-W121C/P1101 External Layout

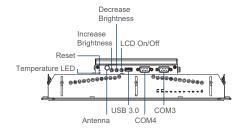
### Front I/O



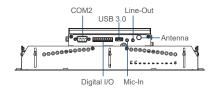
Rear I/O



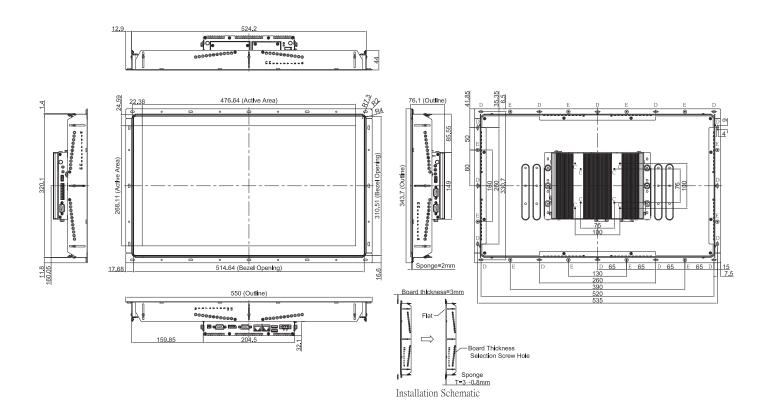
Left I/O



Right I/O



### CO-W121C/P1101 Dimensions





## **Ordering Information**

#### **Available Models**

Model No.	Description
CO-W121C-R10/P1101-E50-R10	21.5" TFT-LCD Full HD 16:9 Open Frame Display Modular Panel PC with Intel Atom E3950 Quad Core Processor and P-Cap. Touch
CO-W121C-R10/P1101-N42-R10	21.5" TFT-LCD Full HD 16:9 Open Frame Display Modular Panel PC with Intel Pentium N4200 Quad Core Processor and P-Cap. Touch

### **Model Configuration**

	CO-W121C	P1101-E50	P1101-N42
CO-W121C/P1101-E50	V	V	
CO-W121C/P1101-N42	V		V

V : Compatible

### **Package Checklist**

• CO-W121C/P1101 Series Panel PC x 1	Power Terminal Block Connector (Female) x 1
DIO Terminal Block Connector (Female) x 1	- Screw Pack x 1
Thermal Pad (for CPU Thermal Block) x 1	Remote Power On/Off Terminal Block Connector x 1

### **Optional Modules and Accessories**

Model No.	Description
CFM-IGN101	CFM Module with Power Ignition Sensing Control Function, 12V/24V Selectable (43 x 36 mm)
CFM-PoE02	CFM Module with PoE Control Function, Individual Port 25.5W
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)
GST120A24-CIN	Adapter AC/DC 24V 5A 120W, GST120A24-CIN, wide temp (-30°C ~ +70°C), level VI
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