

CICOZE www.cincoze.com

# **CO-W121C/P1001 Series**

21.5" TFT Full HD 16:9 Panel PC w/ Intel® Atom™ E3845 Quad Core, 4x USB, 2x COM, 1x VGA and 1x DisplayPort



### Overview

Cincoze power efficient open frame modular panel PCs (CO-W121C/P1001 Series) support Intel® Atom® processors, and multiple displays. Native I/O ports include LAN, USB, COM, and DIO, offering expansion functions 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.

- 21.5" TFT-LCD with Projected Capacitive Touch
- Onboard Intel® Atom™ E3845 Processor Quad Core, 1.91GHz
- 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



### CO-W121C/P1001 Series

### Power Efficient & Multi-Display

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







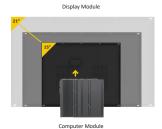
#### Rich I/O for Flexible Expansion

Native I/O ports include LAN, USB, COM, DIO, Mini-PCIe, and SIM slot for additional expansion functions 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 Pending

#### 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  $(0-70^{\circ}\text{C})$ , and wide voltage (9-48 VDC).





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## CO-W121C/P1001 Series

# **CO-W121C Specifications**

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	• 716 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	• 0°C to 70°C	
Storage Temperature	• -20°C to 70°C	
Humidity	• 80% RH @ 40°C (non-condensing)	
EMC	• CE, UKCA, FCC, ICES-003 Class A	
Safety	• UL, cUL 62368-1 (Pending)	



## CO-W121C/P1001 Series

# **P1001 Specifications**

Model Name	P1001	P1001E		
System				
Processor	• Onboard Intel® Atom™ Processor E3845 Quad Core, 1.91 GHz			
Memory	• 1x DDR3L 1066/1333 MHz SO-DIMM Socket (un-buffered and non-ECC) • Support up to 8 GB			
BIOS	AMI 64Mbit SPI BIOS			
Graphics	Graphics			
VGA	• 1x VGA Connector (1920x1080@60Hz)			
DP	• 1x DisplayPort Connector (1920x1080@60Hz)			
Audio				
Line-out	• 1x Line-out, Phone Jack 3.5mm			
Mic-in	• 1x Mic-in, Phone Jack 3.5mm			
1/0	1/0			
LAN	• 2x GbE LAN (Supports WoL, Teaming, Jumbo Frame & PXE), RJ4 - GbE1: Intel® I219-LM - GbE2: Intel® I210	15		
USB	• 1x USB 3.2 Gen1 (Type A), 3x USB 2.0 (Type A)			
СОМ	• 2x DB9 for COM1~2, Support RS232/422/485 with Auto Flow Control			
DIO	• 8x Digital I/O (4in/4out)			
Power Mode Switch	• 1x AT/ATX Mode Switch			
Power Switch	• 1x Power Switch			
Reset Button	• 1x Reset Button			
Storage				
SSD/HDD	• 1x 2.5"SATA HDD Bay			
CFast	• 1x External CFast Socket			
SIM Card	• 1x External SIM Card Socket			
Expansion				
Mini PCI Express	• 1x Full-size Mini PCle Socket for Wi-Fi/GSM/Expansion Module			
I/O Brackets		• 2x Universal I/O Brackets		
Other Function				
Watchdog Timer	Software Programmable Supports 256 Levels System Reset			
Internal Speaker	AMP 2W + 2W (Internal Speaker)			
OSD Function	• LCD On/Off, Brightness Up, Brightness Down			
Power				
AT/ATX Power	Support AT, ATX Mode			
Power Input	• 1x 3-pin Terminal Block Connector with Power Input 9~48VDC			
Power Adapter (Optional)	• 1x Optional AC/DC 12V/5A, 60W Power Adapter			



## CO-W121C/P1001 Series

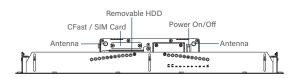
Physical				
Dimension ( W x D x H )	- 204.5 x 149 x 37.5 mm	• 204.5 x 150 x 60 mm		
Weight Information	• 1.34kg	• 1.54kg		
Mechanical Construction	Extruded Aluminum with Heavy Duty Metal			
Mounting	• Wall / VESA / CDS Mounting			
Reliability & Protection	Reliability & Protection			
Reverse Power Input	• Yes			
Over Voltage Protection	<ul> <li>Protection Range: 51~58V</li> <li>Protection Type: shut down operating voltage, re-power on at the present level to recover</li> </ul>			
Over Current Protection	•20A			
ESD Protection	• +/-8kV (air), +/-4kV (contact)			
Surge Protection	• 2kV			
Operating System	Operating System			
Microsoft® Windows®	Microsoft® Windows® 10, Windows® 8, Windows® 7  • Windows® Embedded 8 Standard, Windows® Embedded Standard 7			
Linux	Supports by project			
Environment	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% (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			



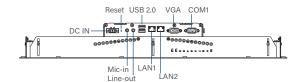
### CO-W121C/P1001 Series

### CO-W121C/P1001 External Layout

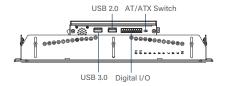
#### Front I/O



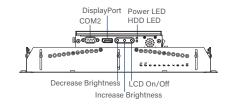
#### Rear I/O



Left I/O

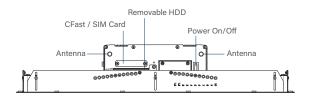


Right I/O

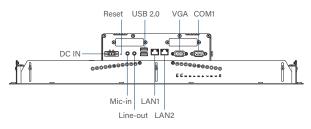


## CO-W121C/P1001E External Layout

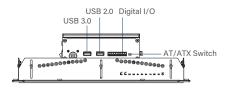
#### Front I/O



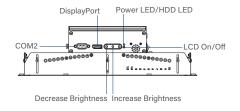
Rear I/O



Left I/O



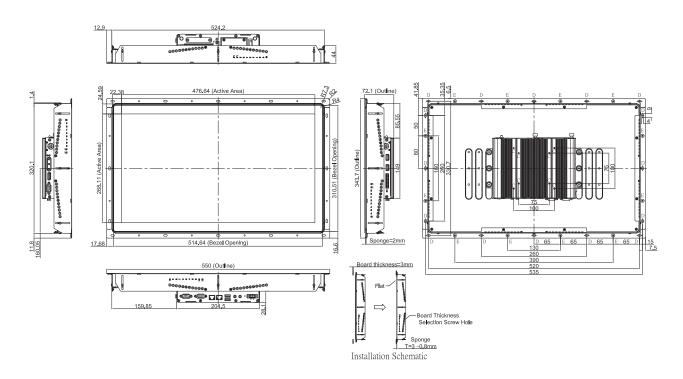
Right I/O



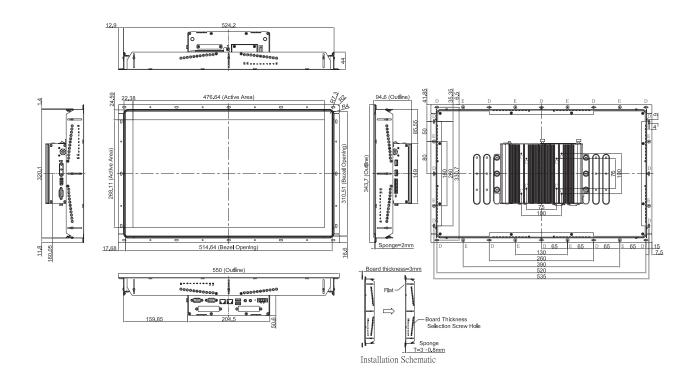


### CO-W121C/P1001 Series

### CO-W121C/P1001 Dimensions



### CO-W121C/P1001E Dimensions



Unit: mm



### CO-W121C/P1001 Series

## **Ordering Information**

#### **Available Models**

Model No.	Description
CO-W121C-R10/P1001-R10	21.5" TFT-LCD Full HD 16:9 Open Frame Display Modular Panel PC with Intel Atom E3845 Quad Core Processor and P-Cap. Touch
CO-W121C-R10/P1001E-R10	21.5" TFT-LCD Full HD 16:9 Open Frame Display Modular and Expandable Panel PC with Intel Atom E3845 Quad Core Processor and P-Cap. Touch

### **Model Configuration**

	CO-W121C	P1001	P1001E
CO-W121C/P1001	V	V	
CO-W121C/P1001E	V		V

V : Compatible

#### **Package Checklist**

CO-W121C/P1001 Series Panel PC x 1	Power Terminal Block Connector (Female) x 1
• Utility DVD Driver x 1	- HDD Screw Pack x 1
DIO Terminal Block Connector (Female) x 1	Mini PCle Screw Pack x 1

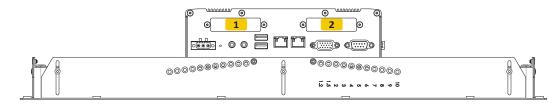
### **Optional Modules and Accessories**

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-PCle 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



# CO-W121C/P1001 Series

#### Optional Module Configuration (For P1001E only)



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

V : Compatible

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# **Assured Systems**

Assured Systems is a leading technology company with over 1,500 regular clients in 80 countries, deploying over 85,000 systems to a diverse customer base in 12 years of business. We offer high-quality and innovative rugged computing, display, networking and data collection solutions to the embedded, industrial, and digital-out-of-home market sectors.

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