CO-W124C/P1101 Series

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



ALL-NEW OPEN FRAME PANEL PC

| CO-100/P1000 Series Fits Any Machine Perfectly |

Overview

CONTACT

Cincoze power efficient open frame modular panel PCs (CO-W124C/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

- 24" 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

IP65 FC CE

Power Efficient & Multi-Display

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



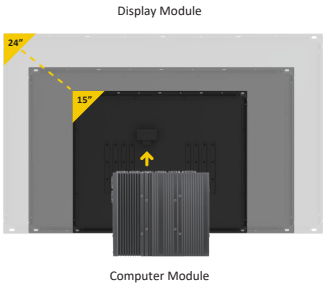
Rich I/O for Flexible Expansion

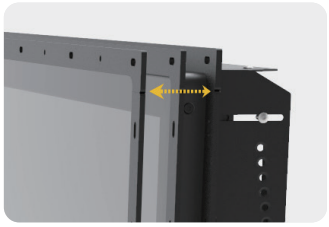
Native I/O ports include LAN, USB, COM, DIO, Mini-PCIe, and SIM slot, while the whole series supports CFM technology for additional expansion functions like Power Ignition Sensing (IGN) or Power over Ethernet (PoE) to meet different application needs.

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.

Patent No. M482908





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

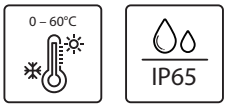
As standard, the open frame modular panel pc can be deployed in equipment machines, but remove the mounting bracket and it becomes a standalone panel pc for use with a VESA mount or in a 19" rack.





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-W124C Specifications

Model Name	CO-W124C
Display	
LCD Size	▪ 24" (16:9)
Resolution	▪ 1920 x 1080
Brightness	▪ 300 cd/m2
Contrast Ratio	▪ 5000 : 1
LCD Color	▪ 16.7M
Pixel Pitch	▪ 0.27675(H) x 0.27675(V) mm
Viewing Angle	▪ 178 (H) / 178 (V)
Backlight LED Life Time	▪ 50,000 hrs (LED Backlight)
Touch Screen	
Touchscreen Type	▪ Projected Capacitive Touch
Physical	
Dimension (W x D x H)	▪ 604 x 387.2 x 63.3mm
Weight	▪ 8.3 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	▪ -20°C - 70°C (with Industrial Grade peripherals; Ambient with air flow)
Storage Temperature	▪ -30°C - 80°C
Humidity	▪ 80% RH @ 50°C (Non-condensing)
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

P1101 Series Specifications

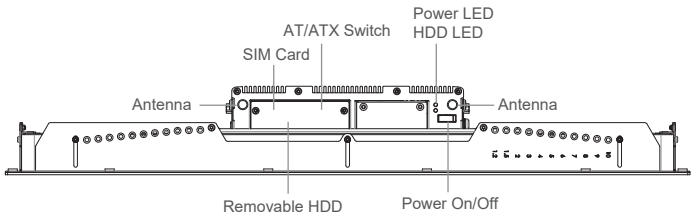
Model Name	P1101
System	
Processor	▪ Onboard Intel® Atom® x7-E3950 Quad Core Processor, up to 2.00 GHz ▪ Onboard Intel® Pentium® N4200 Quad Core Processor, up to 2.50 GHz
Memory	▪ 1x DDR3L 1333/1600/1866 MHz 204-Pin SO-DIMM Socket ▪ Supports up to 8GB (un-buffered and non-ECC)
Graphics	
Graphics Engine	▪ 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
I/O	
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	▪ 1 x SIM Socket
mSATA	▪ 1x mSATA Socket (SATA 3.0, Shared by Mini-PCIe Socket)
Expansion	
Mini PCI Express	▪ 2x Full-size Mini-PCIe 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 On/Off, Brightness Up, Brightness Down
Clear CMOS Switch	1x Clear CMOS Switch
Reset Button	1x Reset Button
Power	
Power Switch	▪ 1x Power Switch
Power Mode Switch	▪ 1x AT/ATX Mode Switch
Power Input	▪ 1x 3-pin Terminal Block Connector with Power Input 9~48VDC
Power Adapter (Optional)	▪ 1x Optional AC/DC 12V/5A 60W or 24V/5A 120W
Remote Power On/Off	▪ 1x Remote Power On/Off Connector, 2-pin Terminal Block
Physical	
Dimension (W x D x H)	▪ 204.5 x 149 x 41.5 mm
Weight Information	▪ 1.49kg
Mechanical Construction	▪ Extruded Aluminum with Heavy Duty Metal
Physical Design	▪ Fanless Design ▪ 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
ESD Protection	▪ +/-8kV (air), +/-4kV (contact)
Surge Protection	▪ 2kV
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
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

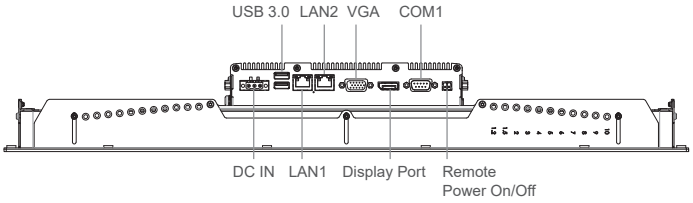
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Safety	▪ UL, cUL, CB, IEC, EN62368-1

CO-W124C/P1101 External Layout

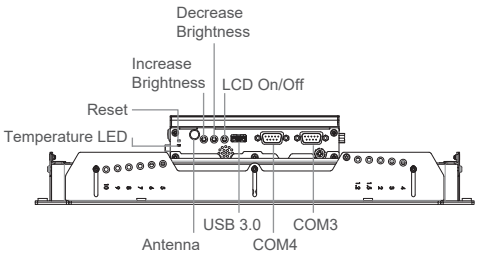
Front I/O



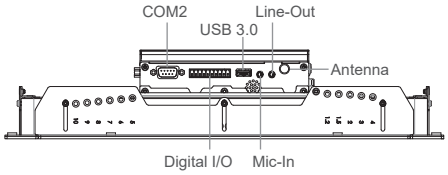
Rear I/O



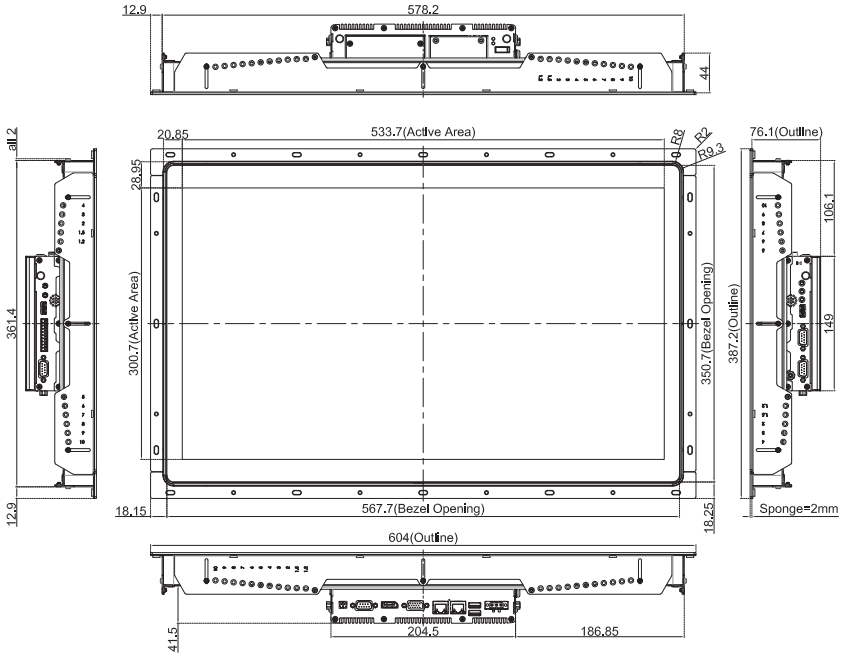
Left I/O

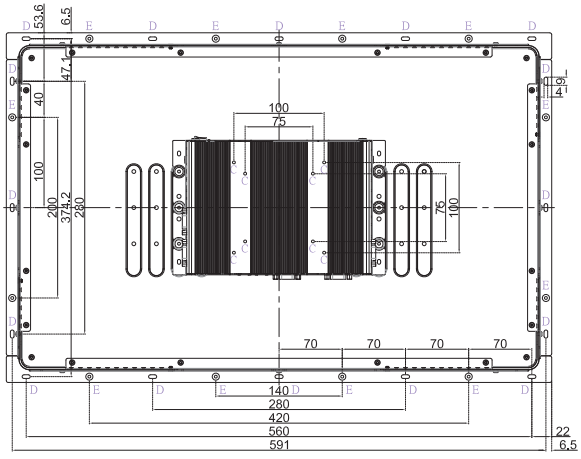


Right I/O



CO-W124C/P1101 Dimensions





NOTE:
1.C=8_M4 VESA Screw holes(5 mm Length Limits)
2.D=16_9*4 Oblong Hole
3.E=12_M4 Screw Hole

Unit: mm

Ordering Information

Available Models

Model No.	Description
CO-W124C-R10/P1101-E50-R10	24" TFT-LCD Full HD 16:9 Open Frame Display Modular Panel PC with Intel Atom E3950 Quad Core Processor and P-Cap. Touch
CO-W124C-R10/P1101-N42-R10	24" 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-W124C	P1101-E50	P1101-N42
CO-W124C/P1101-E50	V	V	--
CO-W124C/P1101-N42	V	--	V

V : Compatible

Package Checklist

▪ CO-W124C/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

Updated: Oct. 31, 2024

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