



## **DI-1200 – Intel® 12th Gen. Alder Lake-P Platform, High Performance and Power Saving Rugged Embedded Computer**

The DI-1200, with a 12th generation Intel® Core™ U-series (Alder Lake-P Platform) processor, provides outstanding performance and boasts a low power consumption of 15W. The compact DI-1200 offers rich I/O interfaces and expansion options, meeting the requirements for high-performance, rugged embedded computers used in confined spaces. It suits for industrial automation, warehousing and logistics, transportation, environmental monitoring, and IoT applications. The DI-1200 supports the 12th generation Core™ i7/i5/i3 U-series (Alder Lake-P) processor based on the Intel® 7 process. Its exceptional processing performance and ultra-low power consumption of just 15W, make it highly suitable for mobile devices limited by battery capacity. The DI-1200 has a footprint smaller than a sheet of A5 paper, with dimensions of only 203 x 142 x 66.8 mm. It is ideal for mobile devices such as AGVs and AMRs, tight spaces in vehicles, or small cabinets in factories. The DI-1200 offers a range of high-speed I/O, including LAN (10GbE, 2.5GbE, 1GbE), USB 3.2 (10Gbps, 5Gbps), USB 2.0, and more, making data and image transmission faster and allowing easy connection to various high-speed devices. The DI-1200 has one M.2 Key E slot and one M.2 Key B slot, supporting a full range of wireless transmission options, including GSM, GNSS, Wi-Fi, and Bluetooth. It also supports the Intel CNVi module, meeting diverse transmission needs. Mobile devices must allow quick access to data. The DI-1200 features a hot-swappable 2.5-inch SATA HDD/SSD slot in the front panel of the chassis, making it easy to remove the hard drive and access the data on it. The DI-1200 showcases its ruggedness and industrial-grade protections through multiple industry certifications. It complies with industrial EMC standards (IEC 61000-6-2 and IEC 61000-6-4), ensuring reliable operation in external electromagnetic interference from surrounding devices. The DI-1200 also meets the U.S. military standard, MIL-STD-810H, ensuring stable operation under extreme shock and vibration conditions.

### SPECIFICATIONS

<b>CPU</b>	12th Gen Intel® Alder Lake-P U-Series CPU
<b>Memory Type</b>	262-pin DDR5 4800MHz SO-DIMM
<b>Memory Slots</b>	1
<b>Maximum Memory Supported</b>	32GB
<b>Integrated Graphics</b>	Intel® Iris® Xe Graphics: Core™ i7-1265UE, i5-1245UE, Intel® UHD Graphics: Core™ i3-1215UE

<b>Watchdog Timer</b>	Software Programmable Supports 256 Levels System Reset
<b>Video</b>	1 x HDMI Connector (3840 x 2160@60Hz), 2 x DisplayPort Connector (3840 x 2160@60Hz), 1 x CMI Interface for Optional CMI-DP/CMI-HDMI/CMI-VGA Module Expansion
<b>LAN Ports</b>	2 x 2.5 GbE Intel® I225 LAN
<b>Serial ATA (SATA)</b>	1 x 2.5" SATA HDD/SSD Bay (SATA 3.0)
<b>RAID</b>	Supports RAID 0/1
<b>M.2 Expansion</b>	1 x M.2 SSD shared by M.2 Key B Type 3052 Socket, Support SATA SSD, 1x M.2 Key E Type 2230 Socket (PCIe Gen 3x1 / USB2.0), Supports Wireless/Intel CNVi Module (The maximum height of the M.2 Key E add-on card is limited to 6.7mm.), 1x M.2 Key B Type 3042/3052 Socket (PCIe Gen 3x1 / USB3.2 Gen2 x1 / USB2.0 / SATA ), Supports 5G/Storage/Add-on Card (The maximum height of the M.2 Key B add-on card varies depending on the installed CMI module.)
<b>Other Expansion</b>	2 x Front Accessible SIM Sockets, 1x CMI Interface for optional CMI-LAN Module, 1x CMI Interface for optional CMI-Display / CMI-COM / CMI-DIO Module
<b>COM</b>	2x RS-232/422/485 with Auto Flow Control (Supports 5V/12V)
<b>USB</b>	1 x USB 3.2 Gen2x1, 2 x USB 3.2 Gen1x1, 3 x USB 2.0
<b>Front I/O</b>	1 x HDMI, 4 x USB, Power Button, LED Lights
<b>Rear I/O</b>	2 x LAN, 2 x COM, MIC In & Audio Out, 2 x USB, 2 x DP, DC Power In, Remote On/Off, Remote LED, Antenna Holes
<b>Audio</b>	Realtek® ALC888, High Definition Audio
<b>Power Input</b>	9 – 48VDC, 3-pin Terminal Block
<b>Inrush Current (Peak)</b>	I7-1265UE CPU: 4.963 A@24V
<b>Dimensions</b>	203 x 142 x 66.8 mm
<b>Weight</b>	1.8 KG
<b>Mechanical Construction</b>	Extruded Aluminum with Heavy Duty Metal
<b>Mounting</b>	Wall / Side / DIN-RAIL / VESA Mount
<b>Operating Temperature</b>	-40°C to 70°C (-40°F to 158°F)

<b>Storage Temperature</b>	-40°C to 70°C (-40°F to 158°F)
<b>Relative Humidity</b>	95% @ 70°C (Non-Condensing)
<b>Shock</b>	MIL-STD-810H
<b>Vibration</b>	MIL-STD-810H
<b>OS Software Supported</b>	Windows®11, Windows®10, Ubuntu Desktop 22.04 LTS

**Global P/N / SKU** 1708607

### Certifications

EMC – CE, UKCA, FCC, ICES-003 Class A, EN IEC 61000-6-4 / EN IEC 61000-6-2 (24VDC Input Only), EN 50155 (EN 50121-3-2 Only), E-mark (Pending), EMI – CISPR 32 Conducted & Radiated: Class A, EN/BS EN 50121-3-2 Conducted & Radiated: Class A, EN/BS EN IEC 61000-3-2 Harmonic current emissions: Class A, EN/BS EN 61000-3-3 Voltage fluctuations & flicker, FCC 47 CFR Part 15B, ICES-003 Conducted & Radiated: Class A, EMS – • EN/IEC 61000-4-2 ESD: Contact: 6 kV; Air: 8 kV, EN/IEC 61000-4-3 RS: 80 MHz to 1000 MHz: 20 V/m, EN/IEC 61000-4-4 EFT: AC Power: 2 kV; DC Power: 2 kV; Signal: 2 kV, EN/IEC 61000-4-5 Surges: AC Power: 2 kV; Signal: 1 kV, EN/IEC 61000-4-6 CS: 10V (\*\*Compliant with the standard when utilizing shielded cable.), EN/IEC 61000-4-8 PFMF: 50 Hz, 30A/m, EN/IEC 61000-4-11 Voltage Dips & Voltage Interruptions: 1 cycles at 60 Hz, Safety – UL, cUL, CB, IEC, EN 62368-1

### Ordering Options

DI-1200-i7-R10 (SKU# 1708607A): Compact and Modular Rugged Computer with Intel Core i7-1265UE  
 DI-1200-i5-R10 (SKU# 1708607B): Compact and Modular Rugged Computer with Intel Core i5-1245UE  
 DI-1200-i3-R10 (SKU# 1708607C): Compact and Modular Rugged Computer with Intel Core e i3-1215UE  
 Package Checklist: 1 x Power Terminal Block Connector 1 xCPU Thermal Pad 1 xRemote Power On/O + Remote Power LED Connector 1 xScrew Pack 1 xFan Terminal Block Connector 1 xWall Mounting Kit 1 xM.2 Key B Type 3052 to 3042 Adapter Bracket [CMI Module List \(https://globalamericaninc.com/wp-content/uploads/2024/12/CMI-Module-List.pdf\)](https://globalamericaninc.com/wp-content/uploads/2024/12/CMI-Module-List.pdf).