

# INDUSTRIAL RACKMOUNT COMPUTER IRC-110 SERIES



Industrial Rackmount Computer with Intel® i3 ~ i9 12th, 13th Generation Processor via socket 1700, R680E Chipset, Supports:  
2- Removable 2.5" SATA drives, 2- DisplayPorts, 1- HDMI, 2- 2.5GbE LAN, 6- USB 3.2 Gen2, 2- USB 2.0, 2- RS232/422/485, TPM2.0, 2- PCI Express: 2.5GbE PoE, 10GbE Network, 5G Cellular



High Performance



Multi-Processor Support



PoE & 10GbE Network Support



Triple Monitor Support



Fanless



5G Ready

## SYSTEM SPECIFICATIONS

Processor	Intel® 12th Gen Alder Lake i3-12100T 4.10 GHz Max Intel® 12th Gen Alder Lake i5-12500T 4.40 GHz Max Intel® 12th Gen Alder Lake i7-12700T 4.70 GHz Max Intel® 12th Gen Alder Lake i9-12900T 4.90 GHz Max Intel® 13th Gen Raptor Lake i3-13100T 4.20 GHz Max Intel® 13th Gen Raptor Lake i5-13500T 4.60 GHz Max Intel® 13th Gen Raptor Lake i7-13700T 4.90 GHz Max Intel® 13th Gen Raptor Lake i9-13900T 5.30 GHz Max
Processor Generation	Raptor Lake-S™ Refresh/Alder Lake-S™
Processor Cores	4 • i3-12100T, i3-13100T 6 • i5-12500T 12 • i7-12700T 14 • i5-13500T 16 • i9-12900T, i7-13700T 24 • i9-13900T
Memory	Up to 64GB DDR4L SO-DIMM
Storage	1 • M.2 SSD up to 4TB 2 • Removable external 2.5" 3.0 SATA drive bay up to 4TB (RAID 0/1/5/10 Support)
Chipset	R680E
Graphics	Intel® UHD Graphics 730 & 770
LAN Controller	3 • Intel® I225-LM 2.5GbE LAN
System I/O	Front 1 • Power Button 2 • USB 2.0 ports 2 • Removable external 2.5" 3.0 SATA drive bay Back 2 • PCI Express Slots 2 • DisplayPort 1 • HDMI 6 • USB 3.2 Gen2 ports 2 • RS232/422/485 ports 2 • 2.5GbE LAN Ports 1 • Line-out 1 • Mic 1 • Power Connector
BIOS	AMI
Watchdog Timer	256 levels, 1~255 sec.
Expansion Interface	1 • M.2 B Key 1 • M.2 E Key 2 • PCI Express Slots x 16
System Indicator	1 • blue LED for system power-on 1 • amber LED for SSD active

## FEATURES

- Intel® 12th & 13th Generation 4- Core & 24- Core processors 4.10GHz~5.30GHz Max
- 64GB DDR4 SO-DIMM max
- 1• M.2 SSD up to 4TB
- 2• Removable 2.5" SATA 3.0 ports up to 4TB each (RAID 0/1/5 Support)
- 6• 3.2 USB Gen2 ports, and 2• 2.0 USB ports
- 2• 2.5GbE LAN, 2• PCIe x 16, 1• M.2 E Key, 1• M.2 B Key
- 1• 5G Cellular (optional)
- 1• 4 Port 2.5GbE PoE Module (optional)
- 1• 10GbE 2 or 4 Port Intel® Network Adapter (optional)
- TPM2.0
- Fanless Design

## MECHANICAL SPECIFICATIONS

Color	Blue & Silver
Construction	Aluminum alloy with heavy steel
Dimensions (W x H x D)	431.8mm x 43.8mm x 304.8mm (17.00" x 1.70" x 12.00")
Mounting	Rail Mount (optional)

## POWER SUPPLY

Power Input	Integrated 400W Power Supply
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## REGULATORY SPECIFICATIONS

Operating Temperature	0°C ~ 60°C (32°F ~ 140°F)
EMI/EMC	CE standards applied (EN 55022 / EN 55024 / EN 55032) FCC 47 CFR Part 15 (Class A) RoHS
Vibration	Operating: 1G 5-500Hz, 3 Axes according to IEC60068-2-64

## ORDERING INFORMATION

Base	IRC-110 1U Industrial Rackmount Computer - Fanless, 12th/13th Gen Raptor Lake-S/Alder Lake-S Processors, Intel R680E Chipset, 1- Power button, 6- USB 3.1 Gen2, 2- USB 2.0 Ports (Front), 3- Intel I225-LM 2.5GbE LAN Port, 2- DP Ports, 1- HDMI, 2- RS232/422/485, 1- Audio Jack: (Line-Out) (Mic-In), 1- PCIe x16, 1- M.2 M Key, 1-M.2 E Key, 1- M.2 B Key, TPM2.0, Integrated 400W Power Supply, (Does not include Power Cord)
IRC-110_ -	

## CONFIGURABLE & ACCESSORIES

Processor	Intel® i3-12100T 4.10GHz Max, Intel® i5-12500T 4.40GHz Max, Intel® i7-12700T 4.70GHz Max, Intel® i9-12900T 4.90GHz Max Intel® i3-13100T 4.20GHz Max, Intel® i5-13500T 4.60GHz Max, Intel® i7-13700T 4.90GHz Max, Intel® i9-13900T 5.30GHz Max
M.2 SSD	250GB, 500GB, 1TB, 2TB, 4TB
2 • 2.5" SATA SSD	250GB, 500GB, 1TB, 2TB, 4TB
DDR4 SO-DIMM	8GB, 16GB, 32GB, 64GB
Operating System	Windows® 10 IoT Enterprise 2021 LTSC High End (i7/i9), Windows® 10 Professional 64bit, Windows® 11 IoT Enterprise 2024 LTSC High End (i7/i9), Windows® 11 Professional 64bit, Ubuntu® Desktop 22.04 LTS 64bit, Ubuntu® Server 22.04 LTS 64bit
WiFi module	Intel® Wi-Fi 6 AX200 Wi-Fi / Bluetooth M.2 Module

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## CONFIGURABLE & ACCESSORIES

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2 • PCI Express  
Module x16

4- Port USB 3.0 to PCI Express Card Expansion card

4- Port 2.5GbE PoE Module

2- Port Intel® 10GbE Network Module

4- Port Intel® 10GbE Network Module

(Verizon®) 5G Embedded Quectel RM520N-GL,  
Includes: 4- 5G Antennas

(AT&T®, T-Mobile®) 5G Embedded Quectel®  
RM520N-GL, Includes: 4- 5G Antennas

6610030321

Sliding Rail Kit  
Power Cord

US Power Cord, Black, 6ft

EU Power Cord, Black, 6ft

UK Power Cord, Black, 6ft

AU Power Cord, Black, 6ft

## WARRANTY

Standard Warranty

2 Year Manufacturer Warranty

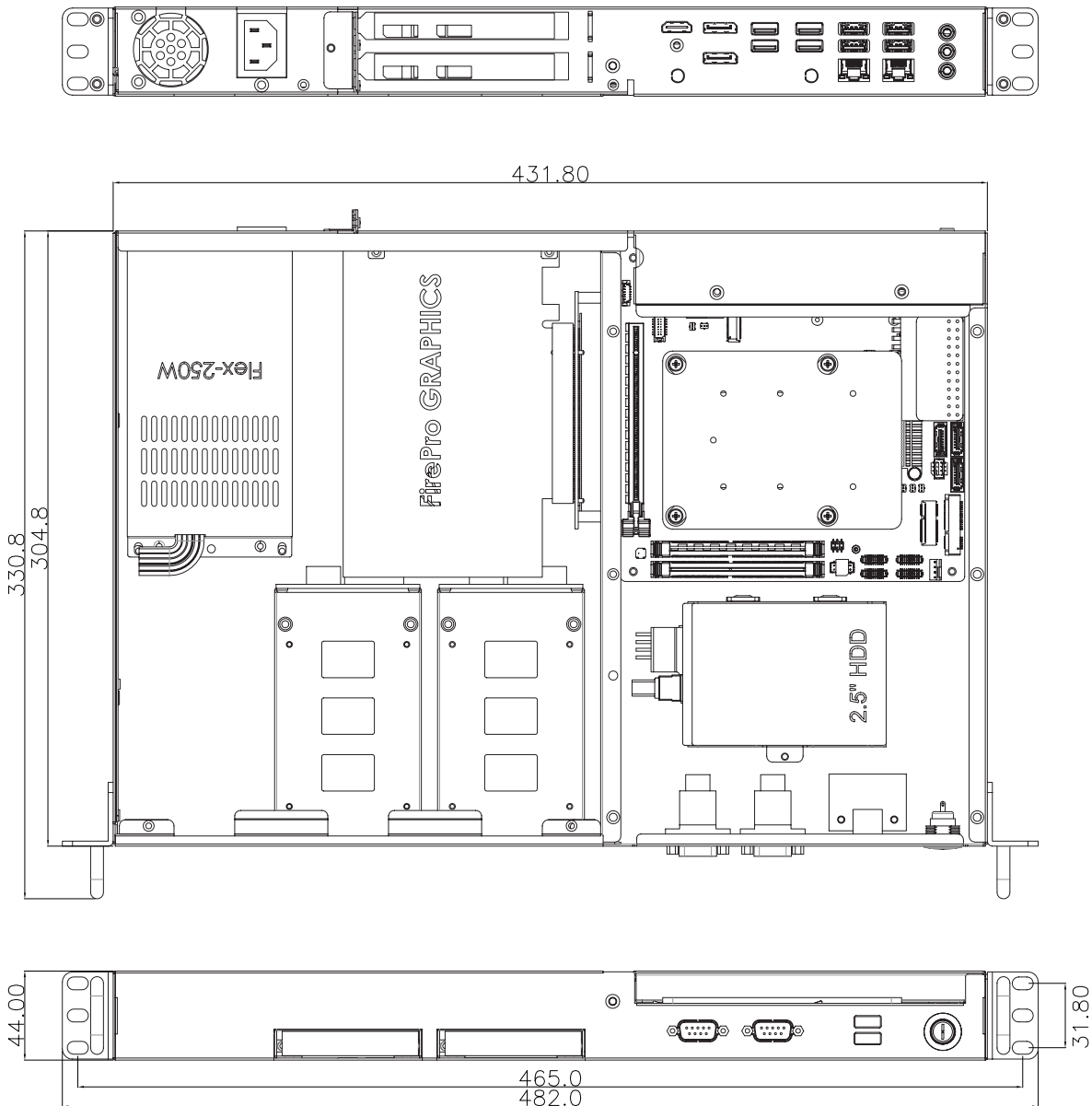
Extended Warranty

TotalCare Protection 3 or 5 Year Extended

Expected Life Cycle

5 Years

## DIMENSIONS



Measurements shown in mm. All dimensions are  $\pm 0.5\text{mm}$