

# EAI-R530

**AI Acceleration Railway Computer  
with Intel® Raptor Lake-P CPU**



## ■ Features

- 13th Generation Intel® Core™ Processor (Raptor Lake-P)
- Certified with EN 50155 and EN 45545 standard
- Hailo-8™ AI Acceleration Module & NVIDIA MXM GPU Module Support
- 2x 2.5GbE POE+ LAN, 4x 2.5GbE LAN, 1x USB 2.0, 2x USB 3.2, 2x HDMI Up to 4K
- IP40 Fanless 2.5U 19" rackmountable
- Wide range operating temperature up to -40°C to 70°C

## ■ Preliminary Specifications

### Processor System

CPU	13th Generation Intel® Core™ Processor (Raptor Lake-P)
Frequency	2.5 GHz
Core Number	8
BIOS	AMI SPI Flash BIOS
Chipset	SoC
Processor Graphics	Intel® Iris® Xe Graphics eligible

### Fanless

Yes

### Memory

Technology	2x 260-pin SODIMM DDR5 IB ECC 4800MHz Sockets
Max. Capacity	Up to 64GB

### Ethernet

Speed	10/100/1000 Mbps
Interface	RJ45

### Storage

Type	SATAIII
Installation	2x SATAIII for 2.5" Storages, within 1x Removable Caddy
Type	M.2
Installation	2x M.2 2242/2280 M Key (PCIe x4) Sockets

### I/O

Display	2x HDMI, Up to 4K@30Hz
LAN	4x 2.5GbE by M12 X-Coded
PoE	2x 2.5GbE by M12 X-Coded, supports PoE(+) IEEE 802.3af/at
Console	1x RS232 by RJ45 Type with Isolated
GPS	Support 4 GNSS (GPS, Galileo, GLONASS, BeiDou)
OOB	1x RJ45 for Out-of-band (OOB) Management Solution
Antenna	8x Antenna for 5G Sub6 2/4x Antenna for WiFi 6E
USB	1x USB 2.0 with Isolated 2x USB 3.2 Gen1

### Expansion

MXM	1x PCIe Gen3 x8 for for i7-13800HE only
M.2	5G Sub6: 2x M.2 3042/3052 B key socket with 1x nano-SIM slot + 1x eSIM reserved WiFi: 1x M.2 2230 E key socket

### Cooling

Processor	Passive CPU heatsink
System	Fanless design with corrugated aluminum

### Environment

Operating Temperature	Up to -40~70°C / -40~158°F
Storage Temperature	-40~85°C / -40~185°F
Relative Humidity	5%~95%

### Miscellaneous

Hardware Monitoring	Yes
Internal RTC with Li Battery	Yes

### Mechanical

Dimension (W x H x D)	438 x 300 x 111.25 mm
Weight	TBD
Form Factor	IP40 Fanless 19" Rackmount, Wall mount (optional)

### Power

Connector	M12 K-coded (Ground, DC_IN, Ground, IGN, Chassis Ground)
Input	DC 24-110V

### Driver Support

Microsoft Windows	Win 11 IoT
Linux	Dabian 10

### Certification

EMC	CE EN55032, CE EN55035, FCC Class A
Safety	IEC 60950-1, IEC 62368, UL/cUL 62368-1
Railway	EN50155, EN45545-2, EN50121-3-2, EN50121-4, EN50124-1, EN50125-3, EN50153
Compliance	MIL-STD-810G

## Product I/O View



**A** DC 24-110V Input

**B** Console Port

**C** USB Ports

**D** HDMI Ports

**E** 2.5 GbE PoE+

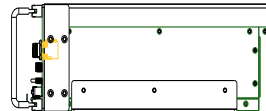
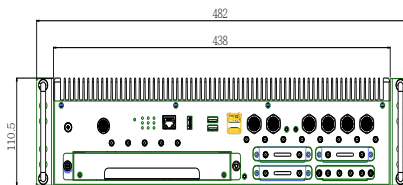
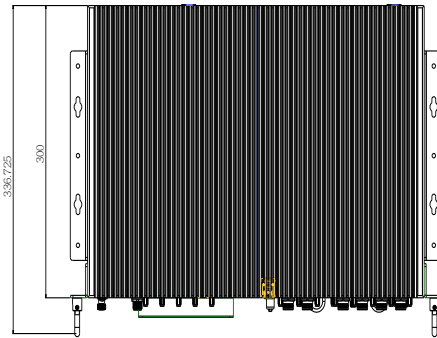
**F** 2.5 GbE LAN

**G** PGN

**H** SIM Cover

**I** OOB

## Dimensions : 438 x 300 x 111.25 mm



## Ordering Information

### EAI-R530A

Intel RPL-P@ i7-13800HE 14C (6P+8E)/20T 45W, 2x DDR5 4800 IB ECC SODIMM, 2x M.2 2242/80 M-Key (PCIe x4), 1x Removable storage caddy supports 2x 2.5" SSD, 2x 2.5 GbE PoE+ LAN under maximum 60W power budget, 4x 2.5 GbE LAN, 1x MXM type A/B under maximum 60W power budget, 6x M.2 3042/3052 B-Key (4 out of 6 from PGNs), 1x M.2 2230 E-Key, GPS, DC 24-110V input by M12 K-coded, OOB, operating temperature -40~55°C

### EAI-R530B

Intel RPL-P@ i7-1370PE 14C (6P+8E)/20T 28W, 2x DDR5 4800 IB ECC SODIMM, 2x M.2 2242/80 M-Key (PCIe x4), 1x Removable storage caddy supports 2x 2.5" SSD, 2x 2.5 GbE PoE+ LAN under maximum 60W power budget, 4x 2.5 GbE LAN, 6x M.2 3042/3052 B-Key (4 out of 6 from PGNs), 1x M.2 2230 E-Key, GPS, DC 24-110V input by M12 K-coded, OOB, operating temperature -40~70°C

### EAI-R530C

Intel RPL-P@ i7-1365UE 10C (2P+8E)/20T 15W, 2x DDR5 4800 IB ECC SODIMM, 2x M.2 2242/80 M Key (PCIe x4), 1x Removable storage caddy supports 2x 2.5" SSD, 2x 2.5 GbE PoE+ LAN under maximum 60W power budget, 4x 2.5 GbE LAN, 6x M.2 3042/3052 B-Key (4 out of 6 from PGNs), 1x M.2 2230 E-Key, GPS, DC 24-110V input by M12 K-coded, OOB, operating temperature -40~70°C

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# Lanner

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