BoltCOR 32-18

- **Intel® Xeon® E and NVIDIA® T4**
- **Fanless EN50155 OT4 Class**
- **Cybersecure**
- **Hot-swap RAID Storage**
- **Hi-Cat LTE and 5G**
- **25Gb Ethernet, Wi-Fi 6+6E and BT 5.2**
- **2U, 19" Rack-mount, Short-Depth**

EN50155

FEATURES

Fanless, Ventless Edge AI Server - Cutting edge GPU acceleration to AI, Vision, and Data Processing workloads

Fanless EN50155 TX Class - Fanless, vent-free enclosure, certified for Rolling Stock in the OT4 temperature class with a wide range (24 - 110VDC) EN50155 S2 power supply

Cybersecure - Advanced protection with electromechanical antitampering detection, TPM 2.0, Secure Boot

Hot-swap RAID Storage - Software and hardware RAID up to level 6, with 4 hot-swap bays and up to two internal devices

Hi-Cat LTE and 5G, Carrier Certified - Up to 4 modems and 8 SIMs, comes with global LTE CAT12 and supports 5G. Multi constellation GNSS provided by cellular modem, or dedicated Untethered Dead Reckoning option

Advanced Networking – Great support for networking with 3x GbE ports, 2x 1/10/25GbE SFP+ ports and the latest wireless technology for Wi-Fi 6 + 6E and Bluetooth 5.2

Easy to Deploy – Compatible with very shallow depth racks and just 2U high, fits in most space-constrained on-board and track-side installations

The BoltCOR 32-18 is a family of 2U, ultra-shallow Edge AI and Storage servers that combines the extreme ruggedization of a fanless, ventless system with the computational power of a high-end CPU and universal deep learning accelerator. The BoltCOR 32-18 is EN50155 certified and meets the requirements of Rolling Stock applications in the OT4 temperature class; it is extremely rugged and suitable for any project where consistent performance and reliability are a must.

The BoltCOR 32-18 supports both traditional and GPU- accelerated workloads thanks to an Intel Xeon E-2276ME, with 6 cores at up to 4.5GHz, a main RAM of up to 64GB ECC DDR4 and one NVIDIA Tesla T4 with 320 tensor and 2560 CUDA cores, and 16GB of dedicated GDDR6 memory.

The BoltCOR 32-18 can also be configured as a storage server, or as a hybrid compute and store device with four hot-swappable SATA drive bays and support for internal NVMe drives. RAID options include software and hardware RAID levels 0, 1, 5, 6.

Designed to enable real server use cases under the harshest operating conditions, the BoltCOR 32-18 comes with high-end features such as three GbE interfaces, two advanced fiber/copper 1/10/20GbE (SFP+).

The BoltCOR 32-18 provides one Cat 12 global cellular (5G global cellular modems, up to 4 modems and up to 8 SIMs options). Wi-Fi 6 + 6E offers gigabit bandwidth and extremely low latency, while Bluetooth 5.2 adds range, location services, data efficiency and mesh capabilities. Multiconstellation GNNS is provided by the cellular modem (dedicated Untethered Dead Reckoning option).

The BoltCOR 32-18 has a 2U, 19" rack-mount form factor and is extremely shallow at just 260mm to fit in most recesses. Expandability options include PCIe x16 G3, PCIe x4 G3, M.2, mPCIe slots, multiple SSD capacities and technologies (Factory Option)

EUROTECH
Imagine. Build. Succeed.

Ordering Code: BTCOR-32-18-XX					
XX		-x1	-x2	-x3	-x4
PROCESSOR	**CPU**	Intel® Xeon® E-2276ME, 6 Cores, 12M Cache, 2.8GHz (4.5GHz)			
ACCELERATOR	**GPU**	-	NVIDIA T4	-	NVIDIA T4
MEMORY	**RAM**	1x32GB ECC DDR4 SO-DIMM	2x32GB ECC DDR4 SO-DIMM		
STORAGE	**Embedded NVMe**	1 x 240GB TLC			
	Internal SATA	Up to 2x (Factory Option)			
	Drive Bay Type	-		4x Hot Swap, Lockable 2.5" Drive Bays	
	Drive Bay Devices	-		4x 512GB SATA 3.0 MLC SSD (up to 2TB, TLC F.O.)	
	RAID	SW RAID 1 (Factory Option)		SW RAID: 0/1/5/6 HW RAID: 0/1/5/6/10 (F.O.)	SW RAID 1 (OS)
	Other	1x SDHC/SDCX Card Slot (UHS-1 50MB/s max) (Service Panel)			
I/O INTERFACES	**Ethernet (Copper)**	3x 10/100/1000Mbps Auto-Sensing IEEE1588, M12 X-coded Connector			
	Ethernet (SFP)	-		2x 1/10/25Gb SFP28, Transceiver Modules Not Included	
	USB	2x USB2.0 Type A Host, Noise and Surge Protected (Service Panel) - 1x USB-C for Console Only (Service Panel)			
	Video Out	1x DisplayPort - 1x miniDisplayPort (Service Panel)			
RADIO INTERFACES	**Internal Cellular**	LTE Cat 12 Global (LTE 5G Sub-6GHz Factory Option) - Up to 4x LTE Modem (Factory Option)			
	SIM	Dual SIM Support per Modem			
	Internal GPS	Integrated in Cellular: GPS, GLONASS, BeiDou/Compass, Galileo and QZSS - Untethered Dead Reckoning (Factory Option)			
	Wi-Fi/BT	Wi-Fi 6+6E with Dual-band Simultaneous 2x2 MIMO, Bluetooth 5.2			
	Antennas	Up to 4x SMA Cellular (LTE), 1x SMA GNSS, 2x RP SMA (Wi-Fi/BLE)			
EXPANSION	**PCI Express**	PCIe x16 G3, PCIe x4 G3, M.2, mPCIe Expansion (Factory Option)			
OTHER	**RTC**	Yes, with SuperCAP (2 Month Retention @25°C)			
	Tamper detection	Service Panel, Enclosure			
	TPM	TPM 2.0			
POWER	**Input**	Wide range, Nominal: 24/36/48/72/110VDC, Isolated EN50155 Class S2			
ENVIRONMENT	**Operating Temp.**	EN50155 Class OT4 (-40 … +70°C) + ST1 (+85°C for 10 min, Test Cycle B)	0 … +50°C (Sub 0°C: Heater - Factory Option)	EN50155 Class OT4 (-40 … +70°C) + ST1 (+85°C for 10 min, Test Cycle B) SW RAID	0 … +50°C (Sub 0°C: Heater - Factory Option)
	Storage Temp.	-20 to +70 °C			
	Relative Humidity	EN 50155:2017			
	Altitude	Up to 2000m			
CERTIFICATIONS (*)	**Vertical**	EN45545-2 Fire & Smoke, EN50155:2017 Rolling Stock, EN 50121-3-2:2016, EN55032:2015 Emissions & Immunity			
	Regulatory	CE, FCC, ISED, JATE, TELEC			
	Safety	EN 50155:2017, EN 62368-1, UL 60950 (§)			
	Environmental	RoHS3, REACH			
	Wi-Fi/BT	CE, JATE, TELEC - FCC, ISED (Factory Option)			
	Cellular Regulatory	RED, PTCRB, JATE, TELEC - FCC, ISED (Factory Option)			
	Cellular Carrier	AT&T, Verizon (Factory Option)			
	Ingress	Designed for IP40, with Conformal Coating			
MECHANICAL	**Enclosure**	Steel / Aluminium			
	Dimensions	2U Rackmount 480x89x260mm (WxHxD) - no Handles/Connectors/Vertical Spacers			
	Weight	< 20 kg	< 20 kg	< 20 kg	< 20 kg
	Cooling	Fanless, Ventless. 2x .5U Vertical Spacers Might be Required to Ensure Proper Ventilation			

(*) Regional certifications depend on specific SKU.

SOFTWARE	
OS	Ordering Code: -1x Ubuntu Certified Ordering Code: -2x Windows 10 IoT Enterprise [Factory Option]

EUROTECH

www.eurotech.com

North America
sales.na@eurotech.com

Latin America
sales.la@eurotech.com

Europe, Middle East and Africa
sales.emea@eurotech.com

Asia Pacific
sales.ap@eurotech.com

For your local contact please refer to:
www.eurotech.com/contacts