



- Fanless EN50155 TX Class
- 19" 1U Rack-Mount Short-Depth
- Intel® Xeon® D and Xeon® E
- Internal, Removable and RAID Storage
- Gb Ethernet and LTE Cellular
- Configurable and Future-Proof
- Long-term Availability



## Features

**Fanless EN50155 TX Class** - Fanless, vent-free enclosure, certified for rolling stock in the TX temperature class with S2 power supply, suitable for any heavy duty application

**Compact** - 19" 1U rack-mount with short-depth form factor to fit in most space-constrained on-board and track-side installations

**Scalable Performance** - Supports the intensive computation of media, data, network and storage-oriented workloads, through CPU options ranging from Intel Core to Intel Xeon D quad core

**Flexible Storage** - Provides internal mSATA, fixed or removable 2.5" SSD/HDD disks with a rugged and locking tray design and RAID levels 0, 1

**Extended Connectivity** - Configurable with multiple simultaneous cellular modules, multiple SIMs, dual Gb Ethernet, Wi-Fi 2.4/5.0GHz, BLE, and GNSS with Untethered Dead Reckoning

**Configurable and Future-Proof** - Based on a modular architecture compliant with industry standards, like COM Express, PCIe and miniPCIe, enables fast customizations and compatibility to future technologies

**Long-term Availability** - Designed for markets and use cases where long-term availability and support is a must have requirement

## Description

The BoltCOR 30-17 is a fanless EN50155 certified server that is designed to exceed the requirements of rolling stock applications in the TX temperature class; it is extremely rugged and suitable for any project where consistent performance and reliability are a must.

With up to 32GB of DDR4 RAM (ECC option), soldered down CPUs, mSATA storage and a S2 class power supply, the BoltCOR 30-17 is extremely resilient; high reliability components, conformal coating, a vent-free design and a sturdy build add extra protection to a compact, 295mm deep, 1U rack-mount chassis.

Based on standard COM Express, it is available in a range of high performance configurations, including Intel 6th Gen. Core i7, i5, Celeron, Xeon D-1500, and Xeon E3-1500 CPUs, with a selection of cores (2 to 8) and frequencies (up to 2.8GHz).

Expandability options include two HDD/SSD drives, key-locked swappable storage bays, internal mSATA, a user-accessible SD slot and RAID levels 0, 1; additional peripherals can be added via four miniPCIe and one x16 PCIe slots.

The BoltCOR 30-17 features a wide range of radio and wireless capabilities, including cellular carrier pre-certified system configurations. Customization options include internal global cellular modems, multiple modem and SIM configurations, MIMO Wi-Fi, Bluetooth Low Energy, and GNSS with Untethered Dead Reckoning.

The BoltCOR 30-17 affords unprecedented system configurability: off-the-shelf configurations and build-to-order variants out of a palette of CPU, power supply, memory, storage and I/O subsystems options.

Designed for rolling stock applications, the BoltCOR 30-17 offers long term availability and support programs that ensure continuity of supply and customer service.

## Ordering Code: BTCOR-30-17-XX

XX		-17	-18	-31	-41
PROCESSOR	CPU	Pentium D-1519 1.5 GHz (2.1GHz), Quad Core, 25W TDP		Xeon E3-1505L v6 2.2GHz (3.0GHz), Quad Core, 25W TDP	
MEMORY	RAM	24GB DDR4 ECC	24GB DDR4	16GB DDR4 ECC Factory Option: up to 32GB DDR4 ECC or non-ECC	
STORAGE	SATA	2x 512GB SSD		2x 512GB SSD Factory Option: up to 2x 1TB SSD	
	Embedded	1x 64GB mSATA	-	1x 64GB mSATA Factory Option: up to 128GB mSATA	
	Drive Bay	1x Removable Drive Bay for up to 2x 2.5" SATA Drives with key-lock mechanism	-	1x Removable Drive Bay for up to 2x 2.5" SATA Drives with key-lock mechanism	
	RAID	Software RAID 0, 1 (Factory Option: HW RAID Controller)			
	Other	1x SDHC/SDXC Card Slot (UHS-1 50MB/s max) (Service Panel)			
I/O INTERFACES	Ethernet	2x 10/100/1000Mbps Auto Sensing IEEE 1588; M12 X-coded Connector		2x 10/100/1000Mbps Auto Sensing IEEE 1588; M12 X-coded Connector Factory Option: up to 3x 10/100/1000Mbps	
	USB	2x Host 2.0 Noise and Surge Protected (Service Panel)			
	Serial	1x Serial Console TTL (Service Panel)			
	Video	-		MiniDisplayPort (Service Panel)	
RADIO INTERFACES	Cellular	LTE Cat 4 EU Modem Factory Option: 3x Modems		LTE Cat 4 Global Modem Factory Option: 3x Modems	
	GNSS	Factory Option		Yes, Factory Option: Untethered GNSS	
	Wi-Fi / BT	802.11 a/b/g/n, BLE 4.0		Factory Option	
	Antenna (External)	2x SMA Cellular, 2x RP-SMA Wi-Fi/BT		2x SMA Cellular, 1x SMA GNSS	
EXPANSION	miniPCle	Up to 4x Full/Half Size Mini PCle Slots (PCle/USB/mSATA)			
OTHER	RTC	Yes, with SuperCAP (2 Months Retention @25°C)			
	Watchdog	Yes			
	EEPROM	32KByte			
	TPM	Factory Option: TPM 2.0			
	Sensors	Temperature (Inside the product); Factory Option: Accelerometer			
	LEDs	1x Power, 1x SATA Activity, 4x Programmable			
	SIM Slot	Up to 3x 2FF (Mini) Dual-SIM Support for up to 3x Modems			
POWER	Input	Nominal: 24Vdc isolated (EN 50155 S2) Range: 16.8 to 31.2Vdc (EN 50155 S2) Factory Option: 110Vdc		Nominal: 110Vdc isolated (EN 50155 S2) Range: 77 to 143Vdc (EN 50155 S2) Factory Options: 24, 48, 72Vdc	
	Consumption	100W Max		80W Max	
ENVIRONMENT	Operating Temp	EN 50155: Class TX (-40 to +70°C, 10 minutes at +85°C)		EN 50155 Class OT4 (-40 to +70°C), ST1 (10 minutes at +85°C)	
	Storage Temp	- 40 to +85°C			
CERTIFICATIONS (*)	Regulatory	CE; Factory Option: FCC			
	Vertical	EN50155, EN45545 (Fire and Smoke)			
	Safety	IEC/UL 62368-1			
	Environmental	RoHS3, REACH			
	Wi-Fi / BT Radio	RED; Factory Option: FCC		Factory Option	
	Cellular Radio	RED; Factory Option: FCC			
	Ingress	IP40			
MECHANICAL	Enclosure	Steel			
	Dimensions	483x313x44mm (WxDxH)			
	Weight	< 7Kg			
SOFTWARE	OS	CentOS 7.5		Ubuntu 18.04 LTS	Windows 10 IoT Enterprise
	IoT Framework	ESF on Docker			

Note: The information in this document is subject to change without notice and should not be construed as a commitment by EUROTECH. While reasonable precautions have been taken, EUROTECH assumes no responsibility for any error that may appear in this document. All trademarks or registered trademarks are the properties of their respective companies.

***Contact Eurotech Sales for availability and custom configurations.***