



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

 EN50155

## 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 dual 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 GPS 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 usecases 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 (optional ECC), 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 and Xeon D-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 x16PCIe slot.

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

### General Specifications

<b>PROCESSOR</b>	CPU	Celeron 3955U 2.3GHz, Dual Core – Core i7-6600U 2.6GHz, Dual Core – Core i5-6442EQ 1.9GHz, Quad Core – Core i7-6822EQ 2.0GHz, Quad Core – Xeon D-15XX 1.5 GHz, Quad Core
<b>MEMORY</b>	RAM	Up to 16GB DDR3L (Celeron 3955U, Core i7-6600U) – Up to 32GB DDR4 (Core i5-6442EQ, Core i7-6822EQ) – Up to 24GB DDR4 ECC (Xeon D)
<b>STORAGE</b>	Embedded	1x mSATA SSD
	Drive Bay	1x Removable Drive Bay for up to 2x 2.5" SATA Drives with Key Lock
	RAID	Software RAID 0, 1 (Factory Option: HW RAID Controller)
	Other	1x SDHC/SDXC Card Slot (UHS-1 50MB/s max) (Service Panel)
<b>I/O INTERFACES</b>	Ethernet	2x 10/100/1000Mbps Auto Sensing IEEE 1588 - M12 X-coded Connector
	USB	2x Host 2.0 Noise and Surge Protected (Service Panel)
	Serial	1x Serial Console TTL (Service Panel)
	Video	1x Mini DisplayPort (Service Panel)
<b>RADIO INTERFACES</b>	Cellular	Up to 2x LTE Cat 4 Modems (Factory Option: 3x Modems)
	GPS	Factory Option
	Wi-Fi / BT	b/g/n, BLE
	Antenna (External)	Up to 4x SMA Cellular (LTE Diversity: 2x Tx, 2x Rx), 1x SMA GPS, Up to 2x RSMA Wi-Fi/BT (Wi-Fi Diversity: 1x Tx, 1x Rx)
<b>EXPANSION</b>	miniPCIe	Up to 4x Full/Half Size Mini PCIe Slots (PCIe/USB/mSATA)
<b>OTHER</b>	RTC	Yes, with SuperCAP (2 Months Retention @25°C)
	Watchdog	Yes
	EEPROM	32KByte
	TPM	Factory Option: TPM 2.0
	Sensors	Temperature (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
<b>POWER</b>	Input	24VDC or 110VDC Isolated EN50155 S2
	Consumption	80W Max
<b>ENVIRONMENT</b>	Operating Temp	EN50155 T1 Class (Celeron and Core i CPUs) – EN50155 TX Class (Xeon D CPUs)
	Storage Temp	- 40 to +85 °C
<b>CERTIFICATIONS (*)</b>	Regulatory	CE, FCC
	Vertical	EN50155, EN45545 (Fire and Smoke)
	Safety	UL 60950 (S)
	Environmental	RoHS3, REACH
	Wi-Fi / BT Radio	RED, FCC
	Cellular Radio	RED, FCC
	Ingress	IP40
<b>MECHANICAL</b>	Enclosure	Steel
	Dimensions	483x313x44mm (WxDxH)
	Weight	< 7Kg

### Software

<b>SOFTWARE</b>	OS	CentOS 7.3, Windows 10 IoT Enterprise
	IoT Framework	Everyware Software Framework (Java/OSGi) Ready

(S) UL, NRTL listing Factory Option.

(\*) Regional certifications depend on specific SKU.

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## Ordering codes (BTCOR-30-17-XX)

BTCOR-30-17-	17	Pentium D-1519, 24GB DDR4 ECC RAM, 1x 64GB mSATA, 2x Disk Bay, 2x 512GB SSD (Removable), 1x LTE Cat 4 [EU] Cellular, no GPS, Wi-Fi/BLE, no TPM, 24VDC Power In, CentOS
	18	Pentium D-1519, 24GB DDR4 ECC RAM, no mSATA, 2x 512GB SSD (Internal), 1x LTE Cat 4 [EU] Cellular, no GPS, Wi-Fi/BLE, no TPM, 24VDC Power In, CentOS

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