



- 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

| | | |
|---------------------------|--------------------|--|
| PROCESSOR | 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 |
| MEMORY | 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) |
| STORAGE | 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) |
| I/O INTERFACES | 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) |
| RADIO INTERFACES | 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) |
| EXPANSION | miniPCIe | Up to 4x Full/Half Size Mini PCIe Slots (PCIe/USB/mSATA) |
| OTHER | 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 |
| POWER | Input | 24VDC or 110VDC Isolated EN50155 S2 |
| | Consumption | 80W Max |
| ENVIRONMENT | Operating Temp | EN50155 T1 Class (Celeron and Core i CPUs) – EN50155 TX Class (Xeon D CPUs) |
| | Storage Temp | - 40 to +85°C |
| CERTIFICATIONS (*) | 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 |
| MECHANICAL | Enclosure | Steel |
| | Dimensions | 483x313x44mm (WxDxH) |
| | Weight | < 7Kg |

Software

| | | |
|-----------------|---------------|--|
| SOFTWARE | 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)

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|--------------|----|--|
| 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.