



- 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



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 (§) |
| | 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 |

(§) UL, NRTL listing Factory Option.

(*) Regional certifications depend on specific SKU.

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.

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.