

BoltGATE 20-25

- EN50155 Class Tx with IP66
- Fanless Performance
- Removable Storage
- Extended Connectivity
- Rich Isolated I/O
- Highly Customizable
- Long-term Availability
- Open Software



EN50155

FEATURES

EN50155 Tx and IP66 - Certified for rolling stock in the Tx temperature class and IP66 rating, suitable for any heavy duty, rugged application

Fanless Performance - Low power and performant, with single, dual and quad core Intel Atom™ E38XX options in a fanless package

Removable Storage - Storage options include eMMC, mSATA, and internal or removable 2.5" SSD/HDD with a rugged tray design

Extended Connectivity - Cellular connectivity with carrier pre-certifications, 2.4/5.0GHz Wi-Fi, BLE, and GPS with Dead Reckoning

Rich Isolated I/O - Versatile set of I/O interfaces such as dual Gbit Ethernet, USB 2.0, isolated DI/O and serial ports, CAN, video (Optional audio in and speaker out)

Highly Customizable - Modular design for application customizations, ranging from factory options to custom front panel connectors and software builds

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

The BoltGATE 20-25 is EN50155 certified and is designed to exceed the requirements of rolling stock in the Tx temperature class. With IP66 rating, it is extremely rugged and suitable for any application where consistent performance and reliability are a must.

Based on the Intel Atom E38xx processor family, with up to 4GB of RAM and 8GB of eMMC, the BoltGATE 20-25 offers extra storage expansions through optional internal or removable 2.5" SATA SSD/HDD, mSATA, and a user-accessible microSD slot.

At 30W max, the BoltGATE 20-25 is a fanless, compact unit that provides a large number of communication and I/O interfaces: two Gbit Ethernet, protected USB (one USB 2.0 for general purpose and one USB 2.0 for maintenance), four isolated serial interfaces, eight isolated DI/O plus odometer and key signals, video and optional audio in/out. It also features a wide range of connectivity capabilities including a global cellular modem, Wi-Fi, Bluetooth Low Energy, and a dedicated internal GPS with Dead Reckoning.

As a result of its modular design, the BoltGATE 20-25 can easily be customized for the requirements of the target application. With three full miniPCIe slots, it can accommodate additional connectivity or communication options and, through Eurotech Professional Services, it can offer custom front panel configuration and connectors or customized software images.

The BoltGATE 20-25 comes with Linux and Windows operating systems. It also includes a genuine Oracle Java SE Embedded 8 Virtual Machine and Everyware Software Framework (ESF), a commercial, enterprise-ready edition of Eclipse Kura, the open source Java/OSGi middleware for IoT gateways. Distributed and supported by Eurotech, ESF adds advanced security, diagnostics, provisioning, remote access and full integration with Everyware Cloud (EC), Eurotech's IoT integration platform (separately available).

BoltGATE 20-25

EN50155 Multi-service IoT Gateway

Specifications

Ordering code: BTGATE-20-25-XX

		Single Core	Dual Core	Quad Core
PROCESSOR	CPU	BayTrail (E3815, 1.46GHz, 1 Core)	BayTrail (E3827, 1.75GHz, 2 Cores)	BayTrail (E3845, 1.91GHz, 4 Cores)
MEMORY	RAM	2GB 1333MHz (DDR3L-ECC)		4GB 1333MHz (DDR3L-ECC)
STORAGE	Embedded	8GB eMMC		
	SATA	2x No Drive	1x 512GB SSD MLC high rel. - 1x No Drive	
	Drive Bay	2x 2.5" Tray with Key Lock		
	Other	1x microSD Slot (Maintenance Panel)		
I/O INTERFACES	Ethernet	2x 10/100/1000Mbps, M12 X-coded Connector		
	USB	2x USB 2.0 Noise and Surge Protected - 1x USB 2.0 (Maintenance Panel)		
	Serial	2x RS-232/422/485 (9 Wires) isolated - 2x RS-485/RS-422 Isolated - 1x TTL Console (Maintenance Panel)		
	CAN 2.0B	1x CANBus 100mA with 5V Power Out, Isolated		
	Digital I/O	4x Digital Input Isolated - 4x Digital Output Isolated - 1x Odometer Isolated - 1x Ignition Key Isolated		
	Video	1x Mini DisplayPort (Maintenance Panel)		
	Audio	Factory Option: 1x 2W Class D Stereo Speaker, 1x Line Out		
RADIO INTERFACES	Cellular	Factory Option: Up to Two 2G/3G/4G (LTE Cat 4) miniPCle Modules		
	GPS	GPS/QZSS/GLONASS/BeiDou/Galileo with Dead Reckoning		
	Wi-Fi / BT	802.11b/g/n, 4.0 BLE		
OTHER	RTC	Yes, with SuperCAP (up up 2 Months Retain), Fast Reboot Support		
	Ext. watchdog	Yes		
	EEPROM	32KB		
	TPM	Factory Option: TPM 1.2/2.0		
	Sensors	Accelerometer, Temperature		
	LEDs	1x Power - 3x MiniPCle Slot - 2x Programmable (Dual Color Green/Amber)		
MISC	Buttons	1x Reset, 1x Programmable (Maintenance Panel)		
	Micro SIM slot	2x Dual-SIM (Maintenance Panel)		
EXPANSION	MiniPCle Slots	3x Full/Half-Size Mini PCle		
POWER	Input	Wide Input Range EN50155 Class S2 (9V - 137.5V)		
	Consumption	30W Max		
ENVIROMENT	Operating Temp	TX according to EN50155		
	Storage Temp	- 40 to +85 °C		
CERTIFICATIONS	Regulatory	EN50155 - EN45545 (Fire and Smoke) - CE - FCC - IC		
	Safety	UL 60950 - EN60950		
	Environmental	RoHS2 - REACH		
	Wi-Fi / BT Radio	RED		
	Cellular (Internal)	PCTRB, AT&T		
	Ingress	IP66		
MECHANICAL	Enclosure	Material: Aluminium - Color: Black Anodized		
	Dimensions	268x141x85mm (LxWxH) – With Connectors		

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SOFTWARE

OS	Yocto Linux or Windows 10 IoT Enterprise
IoT Framework	Everyware Software Framework (Java/OSGi)

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