RT 8000

End-to-end visibility for the entire cold chain.

Automate operations with enhanced connectivity, improved compliance and wireless sensors to digitalise cold chain decision-making.

The RT 8000 delivers the next generation of cold-chain telematics, building on the success of our Euroscan MX2 device, driven by years of customer input, our wealth of industry experience and the latest in cold chain technology.

Track, monitor and control reefer cargo better—and faster—than before. See asset data in one location for improved temperature monitoring, better fuel efficiency, reduced environmental footprint and easier fleet management.

The RT 8000 packs a powerful punch with high-speed processing and increased memory storage that further enables remote reefer control, geofencing, real-time and historical reporting and more. Integrate data more efficiently with multiple new interfaces and the latest wireless technologies to make quicker, better-informed decisions.

More connectivity

Up to ten I/Os make it easy to support any visibility, usage, productivity, security or EBS/TPMS application. Wireless sensor support for temperature (EN12830 compliant) and door makes for quicker, flexible installation and adds to wired support for temperature, door, humidity, fuel and cargo sensors. Bluetooth BLE provides for fast device control and higher-data-rate applications.

Future-proofed communications

A CAT 1 4G LTE modem with 2G support provides faster connectivity. Use the standard embedded SIM or choose your own network with the help of a SIM-free slot. EN 12830 compliance (including data storage on the device), GAMP 5, HACCP and other industry certifications meet the requirements of international cold-chain operators in food distribution, retail logistics and pharmaceuticals.

Built to last

The ruggedised RT 8000 is designed to operate under extreme environmental conditions. The low-power mode avoids draining the fridge battery, while the internal backup battery enables reporting without external power.

Flexible and versatile

Get real-time and historical data from ORBCOMM's SaaS-based platforms, with open APIs available for more control through easy integration into ERP and TMS applications.

Wireless sensor support

Embedded SIM or SIM of choice

Internal back-up battery

Direct interface to cold chain OEM microprocessors

Remote monitoring and control

Event-based alarms

Product variants
- **RT 8000-1100:** Unit with GPS and cellular antenna integrated.
- **RT 8000-2100:** Unit with use of external GPS and cellular antenna.

Compatible refrigeration systems
- Carrier
- Thermo King
- Mitsubishi
- Lummiko
- Konvekta

Mechanical
- Dimensions: 181 mm x 113 mm x 48 mm
- Weight: aprox. 0.450 kg (wire harness adds 1.33 kg)

Environmental
- Operating temperature: -40 °C to +85 °C
- Rated IP65

Operating voltage
- Supply voltage: 10 to 32 volts

Power
- Consumption: nominal value 1.75W
- Low power mode capability

Battery
- Internal backup battery
- Type: Lithium
- Capacity: 2000 mAh

Communications
- CAT 1 4G LTE (2G support) GNSS/GSM
- EMEA:
  - » *LTE-FDD: B1/3/7/8/20/28*
  - » *WCDMA: B1/8*
  - » *GSM: B3/8*
- Wireless connectivity: Bluetooth version 5.3

Memory
- Capable of holding as much as 1 year of temperature data
- Compliant with EN 12830 requirements.

Certifications and compliance
- EN 12830:2018 Class 0.5
- Regulatory: E-Mark, CE, RoHS, GAMP 5

Mechanical Shock and vibration
- Vibration: SAE J1455 (Sec 4.9.4.2 fig 6-8); MIL-STD-810G
- Shock: MIL-STD-810G (Sec 516.6)

External Interfaces
- 10 general purpose I/Os
- 2 CAN
- 1 RS 232
- 1 RS 232 / RS-485
- 1 One-wire

Internal sensors
- One 3-axis accelerometer for shock detection up to 8G

Internal Clock
- Accuracy better than 0.02% within 31 days (EN12830 requirement)

Although we strive to ensure accuracy in all of our published specifications, actual field performance can vary depending on a variety of environmental, installation and usage factors, as well as third-party factors such as cellular providers. The specifications listed are approximations, and do not constitute binding statements or modify the terms and conditions of purchase or lease including, but not limited to, product operational limitations and warranties. All specifications are subject to change without notice. Please check www.orbcomm.com to ensure you have the latest version of these specifications.

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ORBCOMM is a pioneer in IoT technology, empowering customers with insight to make data-driven decisions that help them optimize their operations, maximize profitability and build a more sustainable future. With 30 years of experience and the most comprehensive solution portfolio in the industry, ORBCOMM enables the management of over a million assets worldwide for a diverse customer base spanning transportation, supply chain, heavy equipment, maritime, natural resources and government. For more information about how ORBCOMM is driving the evolution of industry through the power of data, visit www.orbcomm.com.

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