ORBCOMM®

WHERE DATA DRIVES DECISIONS

RT 8110/8120

Enhanced cold chain management

Industry-leading all-in-one trailer and truck monitoring for the transportation of temperature-controlled cargo

The RT 8110 and RT 8120 provide comprehensive cold chain telematics for monitoring and ensuring compliance for food, pharmaceuticals and other temperature-sensitive cargo. These devices offer printed or electronic temperature records, real-time alerts and advanced reports, ensuring precise temperature management from origin to destination.

Choose your location
Available in two configurations—RT 8110 for rugged trailer installation and RT 8120 for compact truck cabin installation—both feature an integrated printer, easy-to-use interface and support for multiple languages. They also meet stringent regulatory standards, including EN 12830:2018 Class 0.5 and HACCP.

Get connected
The RT 8110/8120 offer mulitple connectivity options, including wired sensors, Bluetooth 5.3 support and the ability to connect up to ten wireless sensors simultaneously. With increased processor memory, reliable data storage and an internal backup battery, these recorders ensure continuous and precise temperature monitoring even in challenging conditions.

- **CAT 1 4G LTE modem (3G/2G support)**
- **EN 12830 compliance**
- **Integrated printer**
- **Wired and wireless sensor support**
- **Multiple connections**
- **Embedded SIM or SIM of choice**
- **High-capacity internal battery**

Specifications

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

Operating voltage
- Supply voltage: 10 to 32 volts

Power
- Consumption: nominal value 1.75W, max. 25 W (while printing)
- Low power mode capability

Environmental
- Operating temperature: -40°/+85°C
- Print between 0°C and +50°C for best results
- RT 8110: IP65
- RT 8120: IP20

Humidity
- Relative humidity: 90% at 38°C (SAE J1455 § 4.2.3 Figure 4a)

Memory size
- Capable of holding 1 year of temperature data
- Compliant with EN 12830 and Welmec requirements

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

Mechanical shock and vibration
- Vibration: SAE J1455 (Sec 4.9.4.2 fig 6-8); MIL STD 810 H § 514.8, fig 514.8C-3 and table 514.8C-II
- Shock: MIL STD 810 H § 516.8, fig 516.8-10 and table 516.8-IV

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

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

Communications
- CAT 1 4G LTE (3G/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

Dimensions
- RT 8110: 242 mm x 200 mm x 115 mm
- RT 8120: 187 mm x 60 mm x 160 mm

Weight:
- RT 8110: approx. 1.5 kg
- RT 8120: approx. 1 kg

Certifications and compliance*
- EN 12830:2018 Class 0.5
- Regulatory: RED, CE, R&TTE, RoHS
- 852/2004 AS OF 1.1.2006
- HACCP
- GAMP 5
- CE
- RED

* Pending

Product variants
- RT8120-2500, (RT8110-1500, RT8110-2500, RT8120-2500)

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.

For more information on our solutions or to book a demo, email us: **info@ORBCOMM.com**

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