CT 3500

Next-generation IoT telematics for streamlined refrigerated shipping container operations.

Remote management and control of reefers travelling globally in complex supply chains.

The CT 3500 is the next evolution in remote reefer management, enabling complete visibility and control of assets at every point in the supply chain on land, rail or sea. Our state-of-the-art telematics device provides shippers and carriers with comprehensive reports, analytics, alerts and remote two-way control of reefers to help streamline container operations and drive efficiencies. The CT 3500 includes unmatched global LTE coverage, supports LoRa, Bluetooth 5 and NFC technology, and has optional satellite connectivity.

Improved Asset Visibility and Management

Vastly improve reefer container operations, decision making and business planning with cutting-edge technology that works with the ReeferConnect and VesselConnect platforms to show reefer location, status, critical data and analytics. Reduce operational costs with efficient handoffs and pre-trip inspections; minimize claims and losses by protecting temperature-sensitive cargo; improve customer experience with shipment location and status and more. The CT 3500 can be installed permanently, or temporarily with quick installation and removal for monitoring guest reefers and single trips on a vessel or while at a yard or terminal. Use an app to simplify installation, troubleshooting, and provisioning of the device and additional sensors.

Cargo Damage and Claim Prevention

Mitigate costly claims with customizable alerts that notify when reefer temperature or humidity levels leave normal ranges and when malfunctions or route deviations occur. Two-way control enables quick corrective action by allowing the adjustment of set temperature, humidity, controlled atmosphere parameters, cold treatment and more, all from a centralized location. Add ORBCOMM's 24/7 monitoring service for additional support while containers are in transit.

Streamlined Inspections

Our solution helps eliminate unnecessary delays and optimizes turn times at ports by allowing carriers to run pre-trip inspections remotely while empty reefers are on a vessel to save on labor costs, expedite cargo distribution and improve ROI.

Simplified Data Log Access

Address a key industry challenge with a powerful battery that enables remotely powering up a dormant reefer's micro controller and downloading data logs without sending personnel into the field. The battery is designed to last for the life of the reefer, enabling continued visibility even when the reefer is not in use.

Advanced temperature management

Temporary or permanent installation

Complete two-way control

Remote pre-trip inspections

Global cellular, satellite and LoRa connectivity

Complete, Uninterrupted Connectivity

Featuring the ORBCOMM Global SIM, the CT 3500 delivers the most comprehensive connectivity offerings in the industry with global cellular communications in over 208 countries and 519 networks that use 4G LTE, 3G and 2G.

Monitor and collect critical data from reefers over LoRa networks on land and vessel and seamlessly switch to cellular connectivity when outside of LoRa coverage. Add satellite connectivity with our optional external satellite modem.

Cellular Technology

- LTE FDD B1/B2/B3/B4/B5/B7/B8/B12/B13/B18/B19/B20/B25/B26/B28
- LTE TDD B38/B39/B40/B41
- UMTS B1/B2/B4/B5/B6/B8/B19
- GSM 850/900/1800/1900MHz

SIM Type

Solderable SIM

Communication Protocols

SMS, UDP, TCP, FTP

Wireless

LoRaWAN, BLE, NFC, cellular

Antenna

Integrated cellular/GPS/BLE/LoRa/NFC antennas

GPS Technology

- 72 channels
- Receive tracking sensitivity -157 dBm

Battery

- Internal 2.6 Ah
- Charge temperature: 0°C to 45°C
- Discharge temperature: -20°C to 60°C
- Storage temperature: -20°C to 55°C at relative humidity 65+/-20% RH

I/O

- Digital input: 1
- Digital I/O: 1 configurable as digital input or output or analog input
- Digital I/O: 1-Wire bus
- Analog input: 1

Accelerometer

- 3-axis digital accelerometer with motion detection
- Optional impact detection

Power Input

- 15-36 VAC
- 21-34 VDC
- Max peak 60V at 10 milliseconds
- Over-voltage protection

Physical Specifications

- Ingress protection: IPx9K
- Plastic material: Polycarbonate
- Dimensions: 8.81" x 3.31" x 1.18"
- Color: black

Certifications

- FCC/IC
- PTCRB
- CE Red
- RCM (Australia)
- WEEE

Environmental Compliance

- Operating temperature: -40°C to +85°C
- Internal battery operating temperature: -20°C to +60°C
- SAE J1455, IEC 60529, MIL-STD-810H

Harness/Installation/LEDs

- Universal harness for installation across all OEMs
- RMM/PLM coexistence with included PAD
- Single tricolor LED to indicate unit status (cellular/LoRa/Reefer comms)
- Permanent (VHB) and temporary (bracket) mounts
- Magnetic reset switch

Memory

- Storage of more than 2000 messages
- Storage of more than 5000 onboard 12-point geofences plus unlimited backend geofences
- Storage of reefer software files before updates
- Storage of data log download files before sending

Ingress

IP69K

Flammability

- Enclosure: UL94 V-0
- Cable: UL1581 VW-1

This is a pre-release draft. All specifications are based on pre-release information and are subject to change without notice.

CALL: 1.800.ORBCOMM **EMAIL: SALES@ORBCOMM.COM** **VISIT: WWW.ORBCOMM.COM**

ORBCOMM (Nasdaq: ORBC) is a global leader and innovator in the industrial Internet of Things, providing solutions that connect businesses to their assets to deliver increased visibility and operational efficiency. The company offers a broad set of asset monitoring and control solutions, including seamless satellite and cellular connectivity, unique hardware and powerful applications, all backed by end-to-end customer support, from installation to deployment to customer care. ORBCOMM has a diverse customer base including premier OEMs, solutions customers and channel partners spanning transportation, supply chain, warehousing and inventory, heavy equipment, maritime, natural resources, and government. For more information, visit www.orbcomm.com.

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