

CT 1000

Dry container tracking digitalized for intelligent visibility.

Obtain location and status of dry containers moving through complex supply chains.



The CT 1000 digitalizes dry container tracking, providing visibility and traceability for shipping lines and their customers so they can turn data into decisions about their maritime operations. It allows shippers to estimate arrival times, identify issues and quickly deploy corrective measures to mitigate delays. The solution enables shippers and operators to optimize their businesses and reduce operating costs by helping them identify information gaps in the supply chain.

Customers get location data documenting the asset's journey, with both real-time and historical reporting. With a door sensor, temperature monitoring and impact detection as standard, operators can monitor the status of cargo at all times.

Built and certified for the maritime environment

The CT 1000 is a cellular, solar-powered solution that's designed to last the life of the container. With automatic over-the-air updates and rugged ATEX Zone 2 explosion-proof certification, it's built to require no manual attention after installation. IP67 and IP69K rated, its solar panel and battery have the highest ingress protection level for dust and water. The long lifecycle battery and wide range of temperature operation (from -20° to 70° Celsius) enables reliable and uninterrupted reporting, even in the harshest conditions. The device requires only 10-90 minutes of sun per day, depending on settings and operating conditions. The battery can provide up to three months of operation at 75% capacity without sun exposure.

Easy, fast install

Integrated cellular antennas make the CT 1000 easy to install and remove in about one minute. It can be attached quickly and permanently with two rivets. Optimized for narrow corrugations in containers, the CT 1000's rugged enclosure withstands shock and vibration and protects the device from damage.

Multiple sensor connectivity and dynamic reporting

An internal door sensor records opens and closes to notify of tampering, unauthorized access or unscheduled loading and unloading. Impact detection and ambient temperature data monitors cargo to assess damage and protect against insurance claims. Optional wireless BLE sensors are supported to add other safety or productivity applications. Dynamic reporting allows users to configure reporting intervals depending on whether the container is in motion or stationary.

Leveraging ORBCOMM's SIM and LTE Coverage

The global IoT SIM gives access and roaming on 565 worldwide networks in 180 countries for connectivity options that meet shippers' unique requirements.

Solar powered

Installation in as little as one minute

Rugged maritime-ready construction

ATEX-certified and IP67 and IP69K rated

Multi-network cellular connectivity

Built-in door sensor

Temperature monitoring

Global SIM



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

Dimensions:

- 7.76 x 2.0 x 2.0 inches
- 197 x 50.8 x 50.8 mm
- Plastic material: Polycarbonate
- Color: white

SIM Type

- Solderable SIM

Communication Protocols

- TCP, FTP

Wireless

- BLE and cellular
- Optional backup satellite connectivity

Antenna

- Built-in cellular antenna, GPS/GNSS antenna, BLE antenna

Constellations Supported

- GPS, GLONASS, BeiDou, Galileo and QZSS

Battery

- Charge temperature: -20°C to 50°C
- Discharge temperature: -20°C to 70°C
- Storage temperature: -40°C to 85°C at relative humidity 65 +/-20%

Accelerometer

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

Sensors

- Standard: Door open/close, shock and ambient temperature
- Optional: Wireless sensors by BLE

Certifications

- FCC/IC
- PTCRB
- CE RED 2014/53/EU
- ROHS
- ATEX
- WEEE
- Global Access Approval: Australia/ New Zealand, Brazil, China, Japan, South Korea, South Africa, UKCA, etc.

Environmental

- Operating temperature: -20°C to +70°C
- Internal battery operating temperature: -20°C to +60°C
- IEC 60529
- Vibration: AAR S-9401, rail car body mounted; MIL-STD-810H
- Mechanical shock: MIL-STD-810H (Method 516.6)

Memory

- Storage of more than 2000 messages (90+ days of operation)

Flammability

- Enclosure: UL 94 5VA

Ingress

- IP69K
- IP67

Electrical Output Power

- Cellular radio output power of 2G/3G/4G: Max 33dBm
- LoRaWan radio output power: Max 20dBm
- GSM850: Class 4 (33 dBm ±2 dB)
- EGSM900: Class 4 (33 dBm ±2 dB)
- DCS1800: Class 1 (30 dBm ±2 dB)
- PCS 1900: Class 1 (30 dBm ±2 dB)
- GSM850 8-PSK: Class E2 (27 dBm ±3 dB)
- EGSM900 8-PSK: Class E2 (27 dBm ±3 dB)
- DCS1800 8-PSK: Class E2 (26 dBm ±3 dB)
- PCS1900 8-PSK: Class E2 (26 dBm ±3 dB)
- WCDMA: Class 3 (24 dBm +1/-3 dB)
- LTE-FDD: Class 3 (23 dBm ±2 dB)
- LTE-TDD: Class 3 (23 dBm ±2 dB)

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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