SkyWave

GLOBALWAVE® MT3550

The MT3550 is a versatile all-satellite device designed with a variety of sensor monitoring capabilities for use in many mobile and fixed-asset tracking, monitoring and control applications.

The MT3550 is a versatile and low-cost satellite tracking and monitoring solution well suited for many applications.

This easy to install and use device uses a network of geostationary satellites and a two-way satellite communications protocol to send pre-scheduled status polls or reports; inform the user of events, receive "over-the-air" commands, and receive poll requests for instantaneous GPS location and information reporting.

When combined with cargo, temperature and other sensors, the MT3550 becomes an integral part of an asset allowing monitoring, control and management of critical data from a desktop.

The device's low profile keeps it out of sight from those who might misuse or tamper with the equipment. In the event of theft of a mobile asset, the location accuracy provided by the proprietary Global Positioning System (GPS) receiver ensures accurate position information for fast asset recovery.

Configuration and data retrieval from the MT3550 can be easily accomplished through third-party Internet-based application services provided by Value-Added Resellers (VARs) or by integrating existing customer enterprise software to receive information from the message gateway.

The use of the MT3550 helps eliminate inefficiencies in the utilization and deployment of assets, minimize downtime and allows remote control of vital operating parameters.

FEATURES & BENEFITS

- **Two-way communication** for messaging to and from the asset for near real-time control.
- **Fully acknowledged satellite service** ensures messages to and from the terminal are received.
- **Low message latency** enables applications that require immediate communication. No delays.
- **Over-the-air configuration** for easy and agile application adaption once the asset is deployed, without the cost of dispatching a technician.
- **Accurate and fast GPS function** for precise location information.
- **Ultra-low power consumption** for applications in remote regions that require long battery life.
- **Scheduled, event-based, and on-demand reporting** for users who need regular reports as well as notice of specific events.
- **Support for text messaging, cargo sensors, temperature sensors** and more, for sending messages to the driver or monitoring the local environment around the mobile and fixed asset.
- **Low-profile and inconspicuous appearance** to avoid detection and tampering.
- **Quick and easy installation** reduces installation time and costs and ensures that the asset is back in the field quickly.
- **Low cost of ownership** makes adding satellite capability a logical choice.

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PHYSICAL

Size	• 11.5 cm x 20.3 cm x 2.1 cm
Mass	• <454 grams

ENVIRONMENTAL

Operating Temperature	• -40°C to +85°C
Storage Temperature	• -55°C to +85°C
Humidity	• Meets SAE J1455
Dust & Water Ingress	• Meets SAE J1455
Vibration	• Meets SAE J1455
Shock (survival)	• Meets SAE J1455

ELECTRICAL

Power	• Direct vehicle connection • External lithium battery pack • Over 5-year life @ 2 reports/day • Other battery packs available
Input Voltage Range	• 4.5 to 32 Volts
Power Consumption (Typical @ 7.2VDC)	• Idle mode: <259 µW • Transmit mode: < 9.5 W • Receive mode: <547 mW • GPS power consumption: <662 mW
Mating Connector	• Custom weather-tight (IP67) low-profile power and I/O interface connectors

SATELLITE COMMUNICATIONS

Frequency	• 1626.6 – 1660.5 MHz (From-Terminal) • 1525 – 1559 MHz (To-Terminal)
Elevation Angle	• 20° to 90° for communications link • 10° to 90° for GPS

SATELLITE MESSAGING

From-Terminal	• 11 bytes, 350 bps
To-Terminal	• Up to 38 bytes, 1200 bps

GPS

Acquisition	• Cold: <40 seconds; Warm: <16 seconds
Accuracy	• 11 meters, 95% of the time

CERTIFICATIONS / COMPLIANCE

Satellite	• Inmarsat Type Approval

EXTERNAL INTERFACES

Serial	• 1 RS-232
Analog/Digital	• 1 analog inputs: 0-3 Volts • 1 extended analog input: 0–3 Volts or 0–33 Volts • 4 digital inputs/outputs

PROGRAMMING CAPABILITIES

Reporting	• Polls for GPS location • Optional pre-scheduled, configurable over-the-air, reports every 10 minutes to 24 hours • Events based upon exceeding user-defined parameters • User defined data reports

ADDITIONAL FEATURES

Sensor	• Integrated start/stop sensor

ORDERING CODES

6100103-XX	• MT3550 sensor-enabled terminal
6100098	• MT3550 Evaluation Kit (Excludes Terminal)

About SkyWave Mobile Communications

SkyWave Mobile Communications designs and manufactures integrated satellite terminals, dual-mode satellite/GPRS terminals and provides Inmarsat-based network services to enable dependable, low-cost, remote management, security and logistics solutions. SkyWave's products are designed for a broad range of industries including land mobile, marine, oil & gas, SCADA, government and defence.