

SAT-202

Satellite Terminal

The SAT-202 satellite terminal from Honeywell Global Tracking is a multi-purpose satellite terminal for tracking and monitoring high-value assets like vehicles, vessels, cargo and personnel.

Once assets have been equipped with a SAT-202 terminal and deployed in the field, the SAT-202 automatically selects the most appropriate satellite and regularly transmits its location and any additional message data via secure systems.

The SAT-202 terminal can be used in all environments and is favored in remote regions where terrestrial communication cannot be relied upon. Compact in size, the SAT-202 provides global coverage and can be programmed to send and receive customized data from external sensors – including temperature, humidity, vibration, and shock.

Like many of Honeywell Global Tracking's terminals, the SAT-202 uses the Inmarsat constellation of satellites and the IsatM2M standard. This connectivity method delivers an affordable and reliable direct-to-desktop information service with fast and easy-to-use message handling.

The SAT-202 terminal has three fully configurable inputs/outputs for sensor monitoring, and one open drain output suitable for driving relays and other indicators. The data-logging function includes GPS positions, transmissions and data for more than 6,500 entries which are accessible locally via the serial port. All transmissions are logged with a record of the time the message was created and if applicable, when it was transmitted.



Features

- Global Coverage: Offers secure satellite connectivity worldwide
- Inmarsat and GPS Connectivity: Tracks, monitors and communicates with mobile assets anywhere in the world
- Affordable and Reliable: Enables field-proven and cost-effective tracking solutions for a wide range of applications
- Flexible Mapping: Facilitates viewing of assets using Google and Bing maps in a standard browser, or integrates data feeds into custom enterprise resource planning (ERP) solutions
- Multiple I/O Ports: Allows connected external sensors to report additional data, e.g., speed, tire pressure, and fuel consumption; ideal for fleet management applications.
- Optional Alert Button: Convenient in-vehicle button allows drivers to immediately warn others of dangers

SAT-202 Technical Specifications

Physical	
	112mm x 46mm (4.4" x 1.8")
Dimensions	
Weight Connector	350g, (12.3 oz) (excluding cable)
	12-way plug
Environmental	1000 - 7000 / 1005 - 15005
Operating Temperature	-40°C to +70°C (-40°F to +158°F)
Humidity	≤ 95% @ +40°C (+104°F)
Vibration & Shock	Meets Inmarsat-D & EN60945 requirements
IP Rating	IP66
Power	
Sleep	0.75mW
Receive	1W (incl. GPS)
Slotted Receive	50mW (effective continuous receive power)
Transmit	6W
Power Supply Voltage	9.6V to 32V 'smoothed' DC
Interfaces	
Serial Interface	Asynchronous serial RS232
Baud Rate	4800 or 9600 bps
Parity/Data Bits/Stop Bits	N, 8, 1
Configurable Inputs/Outputs	Three
Open Drain Output	250mA max. sink current
Satellite Connectivity	
Transmitter	EIRP: 0-9dBW Tx Burst Duration: 2s or 8s (auto select) Message length: Standard burst up to 84 bits, Double burst up to 170 bits
Receiver	G/T: ≥-25dB/K at EL = 30° User data rate: ~36 bits per second
110001401	Message length: Up to 800 bits
Elevation Angle	
	Message length: Up to 800 bits
Elevation Angle	Message length: Up to 800 bits 0° - 90° Transmit: 1626.5-1660.5 MHz Receive: 1525.0-1559.0 MHz
Elevation Angle Frequency Range	Message length: Up to 800 bits 0° - 90° Transmit: 1626.5-1660.5 MHz Receive: 1525.0-1559.0 MHz GPS: 1575.42 ± 1.0 MHz Poll/Response: up to 1 minute (typically less) Time to first transmission: up to 45 seconds Forward message delivery: up to 45 seconds
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Elevation Angle Frequency Range Message Latencies GPS Capabilities/Application Custom Features Geofencing Third-party Connectivity	Message length: Up to 800 bits 0° - 90° Transmit: 1626.5-1660.5 MHz Receive: 1525.0-1559.0 MHz GPS: 1575.42 ± 1.0 MHz Poll/Response: up to 1 minute (typically less) Time to first transmission: up to 45 seconds Forward message delivery: up to 45 seconds Return message delivery: up to 20 seconds Channels: 50 Typical time to first fix: Cold Start <29 seconds, Hot Start <1s (GPS was off for less than 2 hours) Typical position accuracy (SA Off): 2.5m (CEP, 2D) Advanced scripting capabilities enable custom features and functionality Alert areas, Safe Areas, Route corridors, Curfews, Waypoints, Checkpoints, Overdue and more.
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For more information:

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