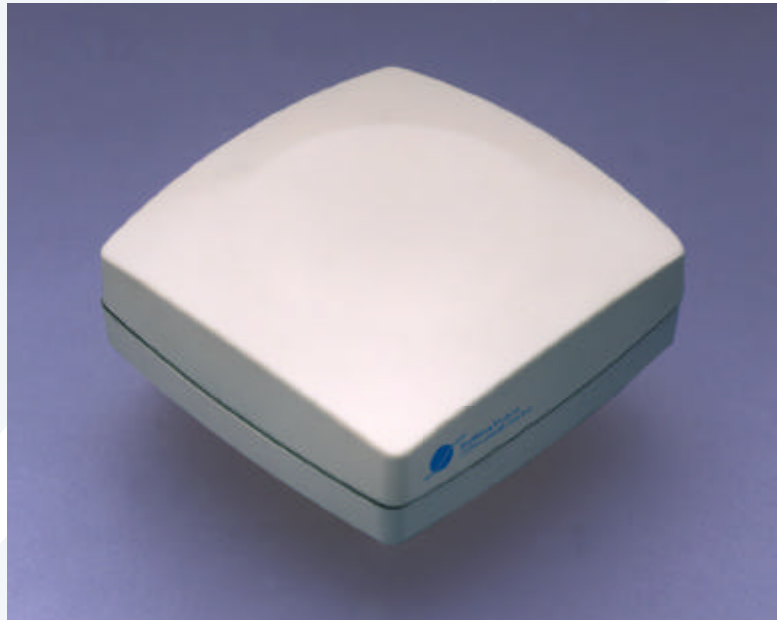




SkyWave Mobile  
Communications Inc.

*Innovations in Global  
Communications™*



## DMR-200 Inmarsat D+ Transceiver

- ✓ Transmit and Receive Data Anywhere Using the Global Inmarsat-D+ Service
- ✓ Ideal for Asset Tracking, Fleet Management & SCADA Applications
- ✓ Smallest 2-Way Inmarsat Terminal Yet  
Single Integrated Unit Measuring Only 121 mm x 121 mm x 41 mm
- ✓ Low Power - Ideal for Battery Powered Applications
- ✓ Integral 8 Channel GPS Receiver
- ✓ Powerful Built-In Scripting Language for Local Processing of Data
- ✓ Extended Operating Temperature Range from -40 °C to +70 °C
- ✓ Wide Input Voltage Range from 9 to 30 VDC



The DMR-200 can be used in fixed, mobile or even portable modes. It can connect to a variety of terminal devices such as compact PCs or dedicated controllers - in fact, almost any serial interface device. Its low power consumption makes it ideal for battery powered environments while its active thermal management and rugged construction allows it to operate in harsh environmental conditions over extended temperature ranges. The DMR-200 operates over a voltage range of 9 to 30 VDC allowing

it to be connected to readily available power sources. Power consumption for the DMR-200 in receive mode is under 1.2 W (2.2 W with GPS active), and 10 W while transmitting.

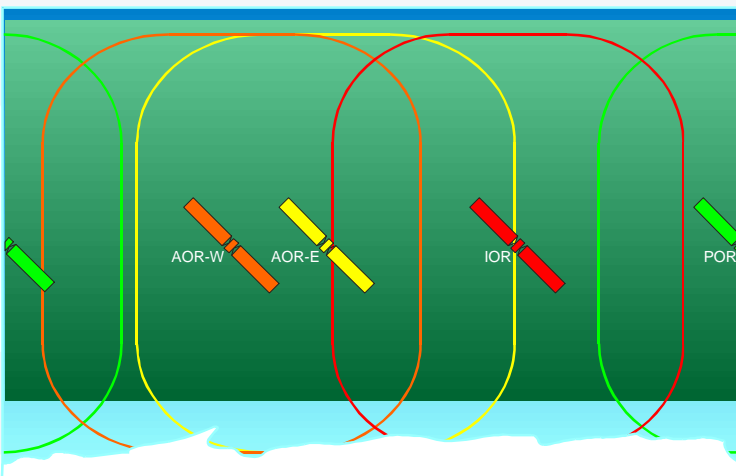
The DMR-200 can also be used for personal messaging applications or to receive broadcast information such as news bulletins, weather information, and financial market updates.

The DMR-200 is an ideal choice as a low cost satellite communications engine for applications where there is a need to



monitor data at remote locations. Our reliable, fully approved and easy to use terminal includes complete technical documentation and terminal evaluation software for application developers and service providers to assist them in quickly integrating the DMR-200 into their application.

If your business depends on up-to-the-minute information, SkyWave Mobile has the answer with the low-cost DMR-200 Inmarsat-D+ data transceiver. The DMR-200 breaks new ground in mobile satcom by being the smallest Inmarsat 2-way terminal yet. The DMR-200, which measures only 121 mm by 121 mm by 40 mm thick, is a complete self-contained satellite terminal. With an integral omni-directional antenna, GPS receiver, and RS-232 user data interface, the DMR-200 is ideally suited to asset tracking, fleet management, and SCADA applications. This product can send and receive data almost anywhere in the world.



Inmarsat's Global Satellite Coverage



A key feature of the DMR-200 is its built-in scripting language. This powerful capability allows local processing of events and data within the DMR-200 so it can monitor external events and then report back automatically when conditions change or exceed a predetermined threshold without requiring a costly external controller. The scripting language gives the DMR-200 the ability to combine different types of data into a single message. This reduces airtime charges and can extend battery life by allowing position and status information to be transmitted from a terminal without requiring multiple messages.

The DMR-200 can either be configured locally through the RS-232 user data port or remotely over the satellite so that the configuration or script of an individual transceiver can be modified in the field without requiring an expensive visit by a technician.

Optional accessories for the DMR-200 include a choice of mounts (magnetic, air dam, pole, and flat

plate) along with the Interface Adapter Module that allows the DMR-200 to sense external analog or digital inputs and control external devices.



# Specifications

# DMR-200 Inmarsat D+ Transceiver

## Ordering Information:

- DMR-200 with GPS (side connector) SM200171
- DMR-200 without GPS (side connector) SM200172
- DMR-200 with GPS (bottom connector) SM200173
- DMR-200 without GPS (bottom connector) SM200174
- DMR-200 evaluation kit SM200175

## Physical:

- Size: 121mm x 121mm x 41mm
- Weight: 425g

## Environmental:

- Operating temperature range: -40° to +70°C  
with heater disabled: -30° to +70°C
- Storage temperature range: -55° to +125°C
- Humidity: <95%RH at 30°C
- Vibration: 5-20 Hz: 1.92m<sup>2</sup>/s<sup>3</sup> random noise  
20 - 500 Hz: -3dB octave random noise
- Shock (survival): Half sine 6 ms, 300 m/s<sup>2</sup>

## Electrical:

- Input voltage range 9VDC - 30VDC
- Power consumption (typ @ 12VDC): Receive: 1.2 W  
Idle: 0.5 W  
GPS Active: + 1.0 W  
Heater Active: + 8.0 W  
Transmit: 10 W  
Sleep: 500 uA
- Mating Connector: CONXALL MINI-CON-X@  
6282-6PG-3XX

## Serial RS-232 Port:

- Host interface: 9600 bps, asynchronous  
8 bits, no parity, 1 stop bit
- Interface Adapter Module: 600 bps, asynchronous  
8 bits, no parity, 1 stop bit

## Satellite:

- Frequency range: Rx: 1525.0 to 1559.0 MHz  
Tx: 1626.5 to 1660.5 MHz
- Sensitivity: > -25 dB/K
- EIRP: 0 dBW to +9 dBW
- Elevation angle range: 30° to 90°
- Modulation: Forward channel: 32-ary FSK, 20 bps  
Reverse channel: binary FSK, 4-128 bps
- FEC: Forward channel: Reed-Solomon (31,15)  
Reverse channel: Half-rate convolutional (k=7)
- Operation Global & Spot Beams
- Reverse channel messages supported: Acknowledgment, Short Burst & Long Burst
- Reverse channel message length: Short Burst: 16 or 23 bits  
Long Burst: 64 bits
- Forward channel messages supported: Tone, Numeric, Alphanumeric & Transparent
- Forward channel message length: Numeric: up to 32 digits  
Alphanumeric: up to 128 characters  
Transparent: up to 250 bytes

## GPS:

- Frequency: 1575.42 MHz
- Channels: 8 parallel

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The satellite path must be unobstructed and the product must be operated within the regions served by the Global Inmarsat service.  
Inmarsat D+ service available from Station 12 and other Inmarsat service providers

Specifications subject to change without notice.  
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For more information on the DMR-200 please contact:



**SkyWave Mobile  
Communications Inc.**

3701 Carling Avenue, PO Box 11490 Station H,  
Ottawa, Ontario Canada K2H 8S2  
tel: (613)-820-7337 fax: (613)-820-7579  
web: [www.skywavemobile.com](http://www.skywavemobile.com)  
email: [sales@skywavemobile.com](mailto:sales@skywavemobile.com)

Dealer Stamp