

# SkyWave



## **DMR-200 C** **Inmarsat D+ Mobile Services** **Satellite Transceiver**



### **Track, Monitor, or Control** **any asset on land or at sea with SkyWave's** **DMR 200 Satellite Transceiver**

The SkyWave Mobile Inmarsat D+/GPS satellite transceiver is the smallest Inmarsat 2-way terminal available and is the ultimate solution to track monitor or control any asset around the world. With the DMR 200, you can send and receive messages to and from any asset whether it's on land, at sea or in the air. Whether you need to communicate with a truck, a trailer, a train, a boat, a buoy, an oil well head, a valve, or a propane tank, the DMR 200 is the ideal solution.

The DMR-200 is an integrated Inmarsat-D+ transceiver, GPS receiver and omni-directional antenna all enclosed in a rugged, environmentally sealed package. The size of a portable CD player, the DMR 200 weighs less than 600 grams and fits in your hand. The DMR-200's small profile allows it to be mounted simply and inconspicuously, drawing little notice from operators and would-be thieves, making it ideal for asset tracking and security applications. It can also be installed covertly beneath fiberglass or plastic enclosures. Its very low power consumption also makes it the ideal solution for battery-powered mobile applications such as tracking the movement of rail cars, containers, fishing boats or any other assets where access to power is difficult or impossible.

The DMR 200 is the solution of choice for SCADA (Supervisory Control and Data Acquisition) applications. Supervising and controlling remote fixed assets such as industrial oil & gas equipment, water distribution equipment or environmental monitoring equipment is often a challenge as external power sources are unavailable or difficult to access.

The DMR 200's low power consumption allows for remote battery powered operation for periods as long as four to five years. The DMR-200's built-in scripting language is easy to use and allows it to be programmed to operate according to applications specific requirements. Each program, or application specific operating instructions can be loaded into its memory locally through the DMR 200's RS-232 port or remotely by sending the program over the air on SkyWave's D+ network.

**Track, Monitor and  
Control any Asset**

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**Global Coverage on  
Land, Sea or Air**

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**Operates for Years on  
Standard Batteries**

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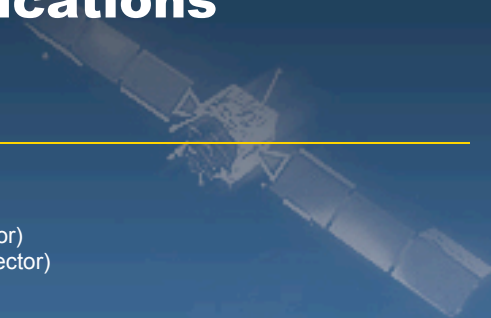
**Small, Lightweight  
and Stealthy**



**Whether you need to track, monitor or control any  
asset on land or at sea, the DMR 200 C is the ideal  
'small message' service for mobile assets.**



# DMR-200 C Specifications



## Configuration Options

DMR-200 C (side mount connector)  
DMR-200 C (bottom mount connector)  
DMR-200 C Evaluation Kit (side mount connector)  
DMR-200 C Evaluation Kit (bottom mount connector)

## Physical

**Size:** 160mm (diameter) x 52mm (height)  
**Weight:** 580g

## Environmental

**Operating Temperature Range:** -40° to +70° C  
**Storage Temperature Range:** -40° to +85° C  
**Humidity:** 95% Relative Humidity at 30° C  
**Vibration:** 5-20 Hz: 1.92 m<sup>2</sup>/s<sup>3</sup> random noise  
20-500Hz: -3dB octave random noise  
Half sine 6ms, 300m/s<sup>2</sup>

**Shock (survival):**

## Electrical

**Input Voltage Range:** 9 VDC to 30 VDC  
**Power Consumption (typ @ 12Vdc):**  
Receive: 0.9W  
Idle: 0.25W  
GPS Active: +1.0W;  
Heater Active: +5.0W  
Transmit: 10W; Sleep: 500µA  
**Mating Connector:** Conxall Mini-Con-X® 6282-6PG-3XX

## Satellite

**Coverage:** Global, four overlapping regions & Spot Beams  
**Frequency Range:** Rx: 1525.0 to 1559.0 Mhz  
Tx: 1626.5 to 1660.5 MHz  
**Sensitivity:** >-25dB/K  
**EIRP:** 0 dBW to 9 dBW  
**Elevation Angle Range:** 15 to 90 degrees  
**Modulation:** Forward channel: 32-ary FSK, 20bps  
Reverse Channel: binary FSK, 4-128bps  
Forward channel: Reed-Solomon (31,15)  
Reverse channel: Half-rate convolutional (k=7)  
**Forward Error Correction:** Acknowledgement, Long Burst  
Long Burst: 64 bits  
Tone, Numeric, Alphanumeric & Transparent  
Numeric: up to 200 digits  
Alphanumeric: up to 133 chars  
Transparent: up to 800 bits payload (depending on priority)

## GPS

**Frequency:** 1575.42 MHz  
**Channels:** 12 parallel

## Certifications

Inmarsat D+ Type Approval  
CEMark  
IP56

**Wide Input  
Voltage Range**

**Application Specific  
Programmability**

**Over the Air  
Configuration and  
Programming**

**RS 232 Interface**

## SkyWave

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