

SkySite® Modem RM-1000

SkySite Network Compatible Wireless Modem

Space Data Corporation

Space Data's SkySite® Network enables wireless data communications in geographic regions that are poorly served by existing wireless technologies and services.

The SkySite Network

Space Data's SkySite Network is a unique, aerial wireless data network that provides wide area data communications coverage using the ReFLEX 2.7 two-way packet data communications protocol.

The SkySite Network operates at an altitude of 80,000 to 100,000 feet and is held aloft by the same weather balloons that have been used for over sixty years to gather information for daily weather reports. SkySite Platforms are launched, recovered and reused several times per day. Each SkySite Platform can provide wireless coverage to an area the size of Oklahoma.

SkySite Network Advantages

Wireless Data Coverage Everywhere. The SkySite Network can provide communications to every site in the field – no matter how remote the location.

Cost-Effective Hardware. The combination of industry-standard ReFLEX technology and low power requirements means that the RM-1000 SkySite Modem can be offered at competitive prices.

Low-Power Hardware. With an average power consumption of 30 mA or less, the RM-1000 can use standard solar/battery configurations.

Clear Spectrum. Space Data owns and operates its own radio frequency spectrum, so there's never a problem with interference or unavailable frequencies.



RM-1000 Features

- Optimized for operation on the Space Data SkySite Network
- Low power consumption
- Access via Fixed IP address
- Auto-recovery from power cycle
- LED on/off for solar sites
- Rugged enclosure
- Local and remote diagnostics
- Compatible with other ReFLEX networks
- Compatible with a wide range of industry RTU, EFM, PLC, and pump-off controller equipment

Applications

Energy Industry

- SCADA communications
- RTU monitoring
- EFM monitoring
- PLC monitoring
- Pump-off controller monitoring

Utility Industry

- Distribution feeder line equipment monitoring

Other Applications

- Irrigation / Agriculture
- Water and wastewater
- Chemical storage

RM-1000 Specifications

Space Data introduces the RM-1000, a rugged ReFLEX 2.7-compliant modem designed for near real-time remote SCADA, control and exception-based monitoring using the Space Data communications network or any two-way paging network. The RM-1000 is used in conjunction with devices such as remote telemetry units and electronic flow meters that communicate via a serial interface. As part of the SkySite Network, the RM-1000 offers telemetry and SCADA users the unique ability to wirelessly monitor all of their sites – even those in the most remote locations.

General

- RF Protocol: ReFLEX 2.7
- Tx Frequency: 896–902 MHz
- Rx Frequency: 929–932, 935–942 MHz
- ReFLEX data rates: 800 – 9600 bps
- Serial protocols: Space Data serial command set

Power Requirements

- Input Voltage: 6 – 30 VDC
- Max Tx Current: < 2A
- Max Rx Current: < 40mA
- Avg. Current Drain @ 1 poll/hour: 30mA

Environmental

- Operating Temperature: -40°C to +70°C
- Humidity: 5% to 95% non-condensing

Physical Characteristics

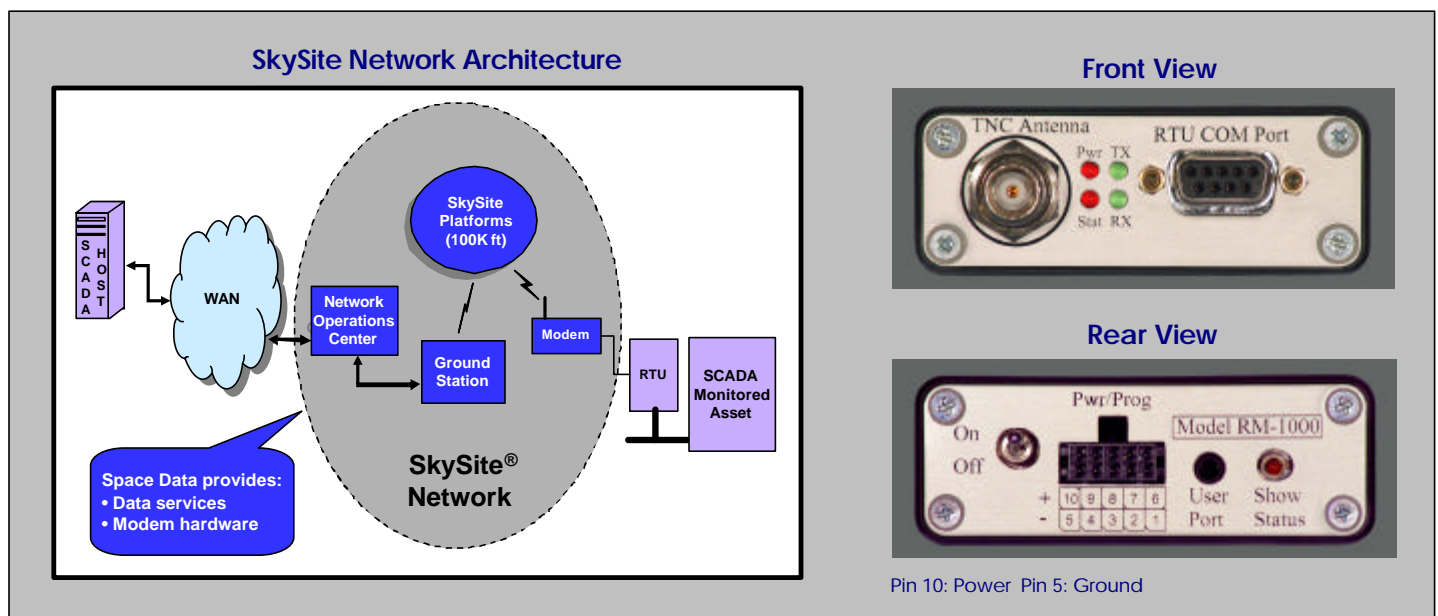
- Weight: 7.5 oz. (212 g)
- Size: 1.1" H x 3.1" W x 4.75" L
- RF Antenna Connector: 50 Ohm TNC
- Serial Interface: RS-232, DB-9 Female
- User Interface: RS-232, 3.5mm plug, serial
- Status LEDs: power, network status, Rx, Tx
- LED Control: on/off
- Case: extruded aluminum

Certifications

- Class I, Division 2 certification pending

Warranty

- Hardware: one year parts and repair labor



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