

Micro-Specialties, Inc.

Data Communications

www.Micro-Specialties.com

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Global Modem + CR1000 = Sensor Data Anywhere

Global Modem is a satellite network modem which uses the Short Burst Data subset of the Iridium global network to communicate small binary data messages from virtually any point on Earth.



Iridium SBD Data Flow

Data flows from the Global Modem, across the Iridium network to MSI's Data Center, where it is archived and available for retrieval. Data retrieval is normally automated via our fast and flexible HTTP data tool, but other options are available.

The basic cost for one Global Modem setup, which includes modem, mounting bracket, antenna and coaxial antenna cable, ranges from about \$1000 depending on the antenna configuration. The initial purchase includes activation and the first month's service fee. The monthly service fee is \$25 per unit, which includes 12,000 bytes of throughput. Additional throughput is invoiced monthly at \$1.50 per 1000 bytes. Our heavy duty marine antenna is about the size of a soda can and will provide the best service in most siting situations. Alternatively, a much smaller "hockey puck" antenna can often simply be placed within a non-metallic NEMA instrument enclosure along with the modem and data logger.



Iridium Global Network Constellation

The Global Modem is small, very simple to setup and consumes very little power. Global Modem operates reliably to at least -50 degrees Celsius. It is designed to work with CSI's CR800, CR1000 and CR3000 data loggers. Hundreds of Global Modems are currently deployed in Alaska, other states and internationally.

Hockey Puck Antenna



Global Modem, Antenna, CR1000



Global Modem Specifications

- Power Supply Voltage: 9 30 VDC
- Standby Current (power off): 0 ma
- Idle Current Average (power on): 45 ma
- Peak Current (transmit pulse): 1600 ma
- Average Operating Current (1 msg/hr): < 2 ma
- Operating Temperature: -50 to +85 degrees C
- Logger Interface: Logic Level Serial (Wiring Panel or CSIO)