



## THE LEADER IN REMOTE ASSET TRACKING



### Q4000

#### GLOBAL COVERAGE

- ORBCOMM
- IRIDIUM
- GLOBALSTAR
- GSM
- GPS

#### INDUSTRIAL STRENGTH

Tested to meet or exceed J1455 requirements.

#### PHYSICAL SPECIFICATIONS

Size: 3.91" x 2.52" x .63"  
(99.3mm x 64mm x 15.9mm)  
Weight: .375lbs (170 grams)

#### Variations:

iQ  
Part # 1135-NGSACN2NN  
Q1400  
Part # 1135-NGNNCR2NC

Though the Q4000 is small enough to fit in your hand, it is a rugged industrial grade modem which combines dual-mode operability over multiple satellite constellations and GSM terrestrial networks with GPS into a versatile, all-in-one remote asset tracking solution.

The Q4000 is designed to meet stringent automotive power conditioning requirements and has low power draw for battery operated applications. It incorporates an application programming interface (API) that allows developers to utilize its functions to create customized onboard applications. Customers have numerous customization options including multiple inputs/outputs, antenna detection, J1939 CAN bus, memory and network accessibility. Additional configuration options are available on volume orders.

Utilizing QUAKE's patented technology and industry exclusive unified communications protocol, system integrators need only develop within a single protocol to communicate across multiple satellite and terrestrial networks along with GPS. This functionality not only significantly reduces development time and costs, but also provides end users with unparalleled flexibility to choose the most economically appropriate network to meet their varied network needs and usage patterns.

Designed for multiple applications, the Q4000 is a flexible solution that can cost-effectively retrieve data automatically from isolated power substations or remote metering facilities such as oil and gas supply stations. Mobile assets such as trucks, ships and containers can also be more effectively monitored and managed. QUAKE's Q4000 intelligent modem provides economical two-way machine-to-machine (M2M) and business-to-business internet communications with land, marine or aviation based assets and equipment anywhere in the world.

1135-0900D Q4000 Marketing Data Sheet



# Q4000

## ADVANTAGES

- Customizable dual mode ORBCOMM/Iridium/Globalstar/GSM with GPS
- Fully user programmable standalone solution
- Individual inputs can be specifically configured to continuously monitor sensors and to report at selected intervals
- Alarm conditions can be pre-programmed to report the condition automatically and immediately
- Reports can be generated on a regular schedule, by exception-only reporting or a combination of both

### SERVICES AVAILABLE

- Technical Support
- Software Support
- Hardware Support
- Guaranteed Warranty
- Software Engineering
- Application Development



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## TECHNICAL SPECIFICATIONS

### Communications – ORBCOMM\*

Transmit Freq: 148.000 to 150.050 MHz  
 Receive Freq: 137.000 to 138.000 MHz  
 Transmit Power: 5W min. - 10W max.

### Communications – GSM/GPRS

Quad Band Operations  
 GSM 850/900/1800/1900 MHz  
 SMTP, POP3, SMS, TCP, GPRS, UDP, FTP

### Communications – Globalstar (Simplex)\*

Transmit Freq: 1611.25 - 1618.75 MHz  
 Transmit Power: 156 mW  
 Packet Size: 9-144 bytes

### Communications – Iridium\*

Transmit Freq: 1616 - 1626.5 MHz  
 Transmit Power: 2 W  
 Packet Size: Tx 340 bytes / Rx 270 bytes

### Data Interfaces

3 Serial RS-232C\*\*\*  
 J1939 CAN Bus

### Input / Output

2 Analog Inputs  
 Up to 8 Digital GPIOs  
 4 Digital Outputs (RELAY)  
 ORBCOMM/GSM/GPS Antenna Detection

### GPS

22 Channels

### Power

External Power Source: 6-32 VDC\*\*  
 Power Consumption: (12V)  
 Transmit ORBCOMM: 1.8 A (Nominal)  
 Transmit GSM: 0.2 A (Nominal)  
 Transmit Globalstar: 100 mA (Nominal)  
 Transmit Iridium: 550-850 mA (Nominal)  
 Sleep: 30 uA

### Real-Time Clock

Programmable

### Memory

Flash: 2M, 4M\*, 8M\*  
 RAM: 2M, 4M\*, 8M\*

### Environmental Specifications & Certifications

Operating Temperature: -40C to + 85C  
 Storage Temperature: -50C to + 85C

Rated to J1455  
 FCC Certified  
 PTCRB Certified  
 CE Mark  
 RoHS Compliant

\*Optional – See your QUAKE representative for details.  
 \*\*Satellite Tx requires a minimum of 10.5 VDC  
 \*\*\*Depending on the model number and serial ports memory