



# Q4000

## Multi-network communications device

### Advantages

- › Stand-alone communications solution
- › Increases developers' capabilities with API (Applications Programming Interface)
- › Meets technical requirements by offering an array of customization options
- › Built-in data compression
- › Network agnostic for global use
- › J1455 compliant

### Options

- › CAN Bus J1939
- › 3 Serial RS-232C
- › Multiple inputs/outputs: analog, digital GPIO (Digital RELAY), GPS
- › Terrestrial network options: 2G, 3G and LTE
- › Satellite network options: ORBCOMM, Iridium, GPS



The Q4000 allows you to design your own M2M device. Power in the palm of your hands, literally. It is a feature-rich M2M device that offers robust customizable options. These options vary from terrestrial, satellite or dual-mode network configurations to programmable onboard applications. The Q4000 enables you to realize your M2M solution goals much faster in a cost effective manner. Connected at all times, wherever, whenever. It keeps you in constant communication with your assets.

The Q4000 is a rugged industrial grade M2M modem in a compact form factor that is small enough to hold in your hand. It is designed to meet exacting standards on automotive power conditioning requirements and features a low power draw load for battery operated applications. The Q4000 uses an API (Application Programming Interface) that empowers developers to integrate its functions and build customized onboard applications. Clients are given a wide array of fully customizable options, including multiple inputs/outputs, antenna detection, J1939 CAN Bus, memory and network accessibility based on their M2M technical and functional requirements.

### Markets Served



Heavy Equipment



Transportation



Oil and Gas

# Q4000 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, UDP, FTP

## Communications- Iridium\*

Transmit Freq: 1616-1626.5MHz  
Transmit Power: 2W  
Packet Size: Tx 340 bytes I 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

50 Channels

## Industrial Strength

Tested to meet and exceed  
J1455 requirements.



## Physical Specifications

Size 3.91" x 2.52" x 6.3"  
(99.3mm x 64mm x 15.9mm)  
Weight .375lbs (170 grams)

## Services Available

Technical Support  
Software Support  
Hardware Support  
Guaranteed Warranty

## Power

|                        |                   |
|------------------------|-------------------|
| External Power Source: | 9-32 VDC**        |
| Power Consumption:     | (12V)             |
| Transmit ORBCOMM:      | 1800 mA (Nominal) |
| Transmit GSM:          | 200 mA (Nominal)  |
| Transmit Iridium:      | 1000 mA (Nominal) |
| Sleep:                 |                   |
| Iridium:               | 25 uA             |
| ORBCOMM:               | 25 uA             |

## Real-Time Clock

Programmable

## Memory

Flash: 8MB  
RAM: 8MB  
Approximately 1MB available for customer applications

## Environmental Specifications & Certifications

Operating Temperature: -40C to+ 85C  
Storage Temperature: -50c to + 85C  
Rated to J 1455

FCC Certified  
PTCRB Certified  
CE Mark  
RoHS Compliant

- \* Optional- Contact your QUAKE representative for details.
- \*\* Satellite Tx requires a minimum 6.5 VDC for Iridium and 10.5 VDC for Orbcomm
- \*\*\* Depending on the model number available, serial ports may vary

Evaluation kits available (includes required cables, antennas, services and airtime)

## Variations

QPRO

