

## VQAM 1000/1500 Product Features and Specifications

	VQAM 1000	VQAM 1500
Power Source	Internal Battery	Internal Battery
Communication	Wireless; 2G/3G Cellular Data	Wireless; 2G/3G Cellular Data
Coverage area	Worldwide Cellular Coverage	Worldwide Cellular Coverage
Telemetry Address	IP; Dynamic (static optional)	IP; Dynamic (static optional)
Configuration States	Multiple; Primary; Conditional or Contingency Event/Alert Driven	Multiple; Primary; Conditional or Contingency Event/Alert Driven
Battery Recharge	12v Inline; or External 12v Charger	5v 1A micro-USB charging port
Internal battery life	Up to Three years; Two years w/bi-weekly reporting; One Year daily reporting	
Internal battery	5000mAh field rechargeable battery (with low battery notification)	
Battery Voltage Monitor	Yes; Internal	Yes; Internal
Disablement Proof	Yes; Centralized Control	Yes; Centralized Control
Activation	Magnetic Trigger	Magnetic Trigger
Wiring Harness	Six 22AWG leads See Harness Detail (below)	No Wiring Harness
Geo-Location & Tracking	GPS & Cellular Tri-location	GPS & Cellular Tri-location
Antennas	Internal; GPS & Cellular	Internal; GPS & Cellular
GPIO inputs; Digital	Three (3) (2) GND Continuity sensing (-) (1) Voltage sensing (6v-36v +)	No GPIO inputs
Temperature monitor	Internal Sensor (Range -50C to 150C +/-2.7C) (Range -58F to 302F +/-4.9F)	Internal Sensor (Range -50C to 150C +/-2.7C) (Range -58F to 302F +/-4.9F)

Waterproof rating	IP67	IP67
Options	Magnetic mount hardware	Magnetic mount hardware
Mounting Location	Interior; Exterior; Low Cost	Interior; Exterior; Low Cost
Mounting Method	Magnetic; Temporary; Permanent	Magnetic; Temporary; Permanent

**Specifications:**

Communication Modes:

- GSM/UMTS, HSDPA/EDGE/GPRS
- Packet data, TCP

GPS:

- 16 channel
- -157 dBm sensitivity
- <2m (CEP50)



*VQAM 1500, Size 3.875" x 2.25"x1"*

Cellular Tri-location:

- If GPS signal is unavailable (for instance if asset is in metal building), VQAM will use cellular tower information for a low-precision location. Accuracy is not possible, but reliable, general location information is available. Precision within ½ mile is about average at this time, but location within 50-300 yards is possible.

Power:

- 5000 mAh lithium rechargeable battery, 3.6 volts
- <50 uA sleep
- <150 mA avg. active

USB charger (VQAM 1500 only):

- Works with any 5v cellphone charger with micro-USB connector
  - Works with portable "battery pack" chargers
  - Internal charging occurs at maximum of 1amp (fast charging not available)
- Optional charger is 5W (1A)

Harness detail (VQAM 1000 only):

- Red = 12v power to the unit (9v-15v range)
- Black = ground of the 12v power
- Green = ground for GPIO use
- White = senses positive voltage 6-36v
- Blue = senses continuity to Green (ground)
- Yellow = senses continuity to Green (ground)

**Battery life:**

- 10 months reporting twice/day
- 15 months reporting daily
- 18 months reporting every other day
- 24 months reporting bi-weekly
- 36 months reporting weekly
- Up to 1500 reports within first six months
- Up to 750 reports within first year

**On/Off:**

- VQAM is turned on magnetically. Once turned on, VQAM cannot be turned off mechanically. It can only be turned off over the air. This prevents disabling.

**Certifications:**

- FCC
- PTCRB
- Applicable carriers

**Mechanical:**

- Dimensions: 3.875" x 2.25" x 1" (3.875" x 2.25" x 1.2" with magnetic mount)
  - Mounting tabs make overall length 4.25"
- Weight: 6.5 ounces (8.1 ounces with magnetic mount)
- Operating temp. -20°C to 60°C (-4°F to 140°F)  
(continued operation at temperature extremes may reduce battery performance)
- Storage temp. -40°C to 80°C (-40°F to 176°F)

**Ingress Protection Rating: IP67**

- Totally protected against dust
- Protected against the effect of immersion up to one meter deep