

AT4h

NEXT-GENERATION DUAL MODE **SATELLITE-CELLULAR** Equipment Tracker



COST EFFECTIVELY MONITOR REMOTE ASSETS WITH ADVANCED MULTI-NETWORK CONNECTIVITY

The AT4h is a flexible, robust, and programmable dual mode satellite-cellular terminal. It is ideal for remotely monitoring fixed and portable assets in industries as diverse as transportation, oil and gas, utilities, maritime and more. The versatile, environmentally sealed AT4h is well-suited for rugged environments in the world's most remote areas.

Satellite-cellular connectivity | Feature-rich and versatile | Flexible programming | Comprehensive integration resources for quick deployment

REPORTING RATES

Powered by equipment (ignition on)

- When in motion the AT4h will report every minute when in cellular coverage and every 15 minutes when out of coverage
- Reports start/stop motion + turns
- Provides frequent location and engine runtime data during operation

While stationary (ignition off)

- · Reports every 24 hours
- Provides location at a lower rate reducing data and power usage

Powered by backup battery

 Delivers power loss message with location when external power is lost

CONTINUOUS OPERATION

- Automatically switches between cellular and satellite connectivity to ensure uninterrupted reporting
- Features a backup battery that enables reporting for up to 12 hours after loss of power
- The device will send a Tethered Power Loss message when external power is lost
- Support for J1939, providing visibility to engine data such as engine hours and fuel consumption for heavy-duty vehicles
- Remote configuration and firmware upgradeable over the air
- Can store and forward up-to 50,000 messages



Satellite Communications

Satellite service: Two-way, Global,

IsatData Pro

Typical latency: <15 sec, 100 bytes

Elevation angle: +20° to +90°

(remote antenna); -15° to +90° (low

elevation antenna)

Frequency:

» Rx: 1525.0 to 1559.0 MHz; » Tx: 1626.5 to 1660.5 MHz

EIRP: < 7.0 dBW

Cellular Communication

Global: Cat 4 LTE (B1, B3, B5, B7, B8,

B28), UMTS (850, 900, 1900, 2100),

Quad-band GSM

Americas: Cat 1 LTE (B2, B4, B5,

B12), UMTS (850, 900,

1900, 2100), Quad-band GSM

Saudi Arabia: Cat 1 LTE (B1, B3, B8,

B20, B28), UMTS

(2100)

SIM: 3.3V/1.8V SIM

GPS/Glonass/Beidou/Galileo

Acquisition time: hot: 1 second;

cold: 26/30/34/26

seconds

Accuracy: 2.0 m CEP-horizontal

Sensitivity:

» Acquisition: -148 dBm

» Tracking: -167 dBm

Certification

CE (R&TTE, RoHS 2), FCC/IC, FFA, PTCRB, Inmarsat type approval, ACMA, ICASA, Anatel, ITF, IEC 60945

Electrical

Input voltage: 9 to 32V; load dump protection: +150V; SAE J1455 (Sec.

4.13)

Battery

Lithium ion: 2,000 mAh

Discharge temperature range:

-20°C to +75°

Dimensions

148 × 113 × 47 mm

 $181 \times 113 \times 47$ mm including

mounting feet

External Interfaces

4 configurable inputs/outputs:

Analog/digital /input/output

4 Digital/analog inputs (2×4-20mA)

Serial: 2 RS-232; 1 RS-485/J1939

2 CAN Bus; 1-Wire

Environmental

Operating temperature:

transceiver and antenna: -40°C to +85°C; back-up battery: -20°C to

+75°C;

Dust and water ingress:

transceiver: IP67;

Satellite/GPS antenna: IP67;

Vibration: SAE J145; MIL-

STD-810G

Shock: MIL-STD-810G

Accelerometer

3-axis accelerometer

