



# ASSET IoT Unit

## ABAX6L Datasheet



### OVERVIEW

---

The ABAX6L IoT unit is ideal for monitoring location of all types of machines, trailers, heavy equipment and high-value mobile assets and is designed for rapid return of investment.

It features a waterproof and ruggedized enclosure and a huge backup battery when needed. Want to protect it more, then add the special designed steelcage for the ultimate protection.

The ABAX6L enables improved operating efficiency, asset recovery, and a easy recharge even when the cage is fitted.

It is part of ABAX IoT global network that combines asset tracking and service and maintenance module solutions in a single platform.

### DESIGNED TO ACCESS THE IOT NETWORK

---

An active unit in the ABAX global IoT network with an advanced positioning system simultaneously reads from multiple independent satellite systems including GPS, Glonass, Galileo and BeiDou global navigation satellite systems.

Internal antenna for discreet installation.

Cat-M1 LTE with 2G fallback world wide connectivity to ensure the unit are always online.

Automatic OTA (Over The Air update).

### TYPICAL APPLICATIONS

---

- Inspection routines for heavy equipment and high-value mobile assets
- For all types machines where power supply is not available
- Trailers for location tracking
- Non Powered Assets
  - Construction equipment  
Containers, barracks, WC, plow, etc.
  - Light towers, vehicle trailers, trolleys
  - Scaffolding, ladders, fuel tanks

### PRODUCT HIGHLIGHTS

---

- Track, monitor and optimize asset location
- Ensure your equipment have a inspection plan
- A robust solution for trailers without power
- A solution for all kind of mobile assets
- Ruggedized and weatherproof enclosure
- Monitor and increase asset utilization
- Optimize asset pool inventory and location
- Recover lost assets





# ABAX6L Datasheet

## GENERAL SPECIFICATIONS

Dimension	65×131.5×19 mm
Weight	235g
Storage temperature	-40°C to +75°C
Operating temperature	-20°C to +60°C
Vibration approvals	Shock form: half sinus Peak acceleration: 500m/s <sup>2</sup> Shock duration: 6ms Number of shocks: ±10 (X,Y,Z) total =60 Test axes: 3 (±X, ±Y, ±Z)
Battery capacity	10 000 mAh / 37 000 mWh Rechargeable USB C plug
Charging time	Over 12 hours from 0-100%, unit is delivered with ca 50% battery. 50 cm USBC-USBA cable provided
Number of postions	900 positions on full battery, with wakeup once per day. Configurable
Available configurations for wakeup	Configurable

## ENVIRONMENTAL DATA, RELIABILITY, CERTIFICATION

Approvals	CE CE, RoHS, REACH,UL
Type Approval	UN ECE R10 Rev.6
IP Grade	IP69K



## GPS SPECIFICATIONS

GPS, Glonass, Galileo and BeiDou enabled GNSS module with ultra-high (167dBm) sensitivity and SBAS support. Quick fix using A-GPS

Based on the Ublox NEO-M8 GPS module

Differential GPS enhancements:

- Satellite based augmentation system (SBAS using EGNOS in Europe) for increased accuracy
- Assisted GPS (A-GPS) enabled for ultra-low TTFF (Time To First Fix)
- 1.2 m accuracy under optimal condition

## MOBILE CONNECTIVITY SPECIFICATIONS

Quad band GSM, Cat-M1 LTE connectivity supporting bands B1, B3, B8, B9, B20 and B28 with 2G fallback

GSM network positioning based on antenna site identification

Global support for antenna site triangulation and positioning

Ca. 97% coverage for Europe's GSM network (in terms of GSM positioning)

Timing advance support

## INTERFACES

Radio communication frequency	Bluetooth Smart 5.2
Configuration	Automatic OTA (Over The Air update) firmware and configuration updates
Sensors	Accelerometer, Gyro, GNSS and temperature