



# ABAX 60 Datasheet



## OVERVIEW

Typical applications	IoT gateway ideal for monitoring all vehicles with an OBD-II plug. Easy installation behind panels or on dashboard.
Use cases	<ul style="list-style-type: none"> <li>• <b>Live Fleet Tracking:</b> Monitor vehicles, heavy machinery, and high-value mobile assets.</li> <li>• <b>Operational Efficiency:</b> Optimise asset locations, increase utilisation, and streamline maintenance.</li> <li>• <b>Security &amp; Compliance:</b> Recover lost or stolen assets quickly and ensure vehicle tax compliance.</li> </ul>

## GENERAL SPECIFICATIONS

Dimension	32×66×19 mm
Weight	24g (with cable ~140g)
Battery capacity	200 mAh / 740 mWh
Charging time	Ca. 2 hours from 0-100%, unit is delivered with ca 50% battery
Position updates	Powered and in movement: Every 60s Unpowered or still: Every 24h Provides up to 15 positions on full battery

## OPERATING ENVIRONMENT

Operating temperature	-20°C to +60°C
Storage temperature	-40°C to +75°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)

## 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

## 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

## 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

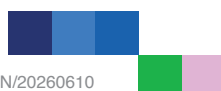
Global support for antenna site triangulation and positioning

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

Timing advance support

## CERTIFICATIONS & APPROVALS

IP grade	IP50
Approvals	CE, RoHS, REACH,UL
Type Approval	UN ECE R10 Rev.6





# ASSET IoT Gateway

## ABAX6U Datasheet



### OVERVIEW

---

The ABAX6U IoT Gateway is ideal for temporarily monitoring of all types of vehicles, vans, heavy equipment and high-value mobile assets and is designed for rapid return of investment.

It features a lightweight enclosure with a USB C connection for simple power supply and a 12V adapter in the box when needed.

The ABAX6U enables the most easy temporarily tracking to ensure improved operating efficiency, and asset recovery.

It is part of ABAX IoT global network that combines asset tracking, fleet management, and compliance solutions in a single platform.

### DESIGNED TO ACCESS THE IOT NETWORK

---

A gateway of the ABAX global IoT network.

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.

Real-time GPS location with live updates.

Automatic OTA (Over The Air update).

### TYPICAL APPLICATIONS

---

- Vehicles - all brands and types
  - Private vehicles with mileage claim
  - Corporate vehicles with temporarily tracking
  - Company vehicles with temporarily tracking
- Powered Assets as long they have USB/12V
  - Construction equipment  
diggers, backhoes, bulldozers, cranes, etc.
  - Forklifts, lifts, dumpers, agriculture
- As a hub for the ABAX MINI's i.e. on a construction site or warehouse

### PRODUCT HIGHLIGHTS

---

- Perfect for mileage reimbursement
- Track, monitor and optimize vehicle location
- A flexible solution for heavy equipment
- A solution for all kind of mobile assets
- Monitor and increase asset utilization
- Optimize asset pool inventory and location
- Recover lost assets





# ABAX6U Datasheet

## GENERAL SPECIFICATIONS

Dimension	32×56×15.5 mm
Weight	26g
Storage temperature	-40°C to +75°C
Operating temperature	-20°C to +60°C
Supply voltage	5 V / 1A USB C to USB A plug
Current usage	0.5A
Battery capacity	200 mAh / 740 mWh
Charging time	Ca. 2 hours from 0-100%, unit is delivered with ca 50% battery. 50 cm USBC-USBA cable provided
Position updates	Every 60 second when powered

## ENVIRONMENTAL DATA, RELIABILITY, CERTIFICATION

Approvals	CE, RoHS, REACH,UL
Type Approval	UN ECE R10 Rev.6
IP Grade	IP5X



## 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
Usage logging or general input	N/A
Configuration	Automatic OTA (Over The Air update) firmware and configuration updates
Sensors	Accelerometer, Gyro, GNSS and temperature