



Piccolo ATX - Battery Powered Asset tracking made simple and affordable by innovation

So advanced, it can operate for up to 5 years
by two standard off the shelf C size lithium batteries,
simplifying service & reducing maintenance cost

Easy Installation

- Magnets - For easy installation on metal surfaces
- Two sided 3M Industrial tape- for a strong, permanent attachment
- Mount the ATX to the asset with 4 screws



Piccolo ATX product specifications

Main Features

- Asset tracking mode of operation – can be preprogramed to send the GPS location every XX hours (usually once a day) when the asset is in stop position. When vibration is detected the unit wakes up automatically and sends an alarm and switches to motion mode sending GPS every XX minutes for as long as the asset is in motion mode (usually every 60 minutes).
- Geofence mode of operation – the unit can change the frequency of transmitting GPS when entering a pre-configured geofence to be detected at first wake up.
- Extremely low power consumption achieved by innovative battery management to preserve battery life.
- With every GPS message, the ATX sends to the server the battery level it currently operates on and current temperature inside the unit.
- Vibration sensor – for automatic security theft alarm and motion detection.
- Tow Detection – the unit detects when the vehicle is moving.
- Store and forward – the unit can store up to 10,000 events when out of cellular coverage then sends them automatically when back in cellular coverage.
- USB port for firmware download and configuration. USB port powers the unit during configuration.
- Optional one I/O event that can wake up the unit and send an alarm.
- Settings changed via SMS.
- Sends cell based locations in addition to GPS coordinates.
- High accuracy achieved with integrated 66 satellite channel MTK GPS technology.

Technical Specifications

- Network availability – 2G GSM/GPRS or 3G HSPA
- Frequency Bands – Quad-Band (European 900/1800, American 850/1900)
- Enclosure: Polycarbonate Lexan 123R(HB-UV) waterproof IP67 enclosure, rated UL94V-0
- GPS – 66 channels MediaTek MT3329
- Dimensions: 5.2" x 3.2" x 1.35" (132mm x 82mm x 34mm)
- Weight: 6oz (170gr) without the batteries

Environmental Specifications

- Operating Temperature: -40° to 176° F (-40° to 80° C)
- Storage Temperature: -40° to 221° F (-40° to 105° C)
- Humidity: 0 to 99% 110F (40C), non-condensing
- Shock/Vibration/Mechanical: meets or exceeds EIA standard RS-316B 3G (operating), 20G (non operating) XYZ 3 directions. Meets SAE J1455

Power source options

- Two off the shelf C size high current lithium batteries, 3.7 VDC each can transmit around 3000 GPS positions

Electrical Specifications

- Current consumption from battery:
 - o standby mode: 40ma at 3V
 - o sleep mode: 45µA at 3V
 - o transmit mode: 1.8A pulse at 3V

Options

- One digital input (Alarm link)

LED Indicators

- GPS: Off when service is disabled, solid green when operating normally, solid orange when GPS current reading is invalid, and solid red on GPS error
- Modem: Solid green when modem is registered, off when no signal is present or unit is off
- Data: Solid red when data is waiting to be transmitted, off when no data is in the buffer
- Power: Solid green when operating normally, off when unit is off

Functional Specifications

- Mode of Operation - The unit sends GPS location every X hours (usually once a day) when the asset is stopped. When vibration is detected, the unit wakes up and automatically sends an alarm and switches to motion mode sending GPS every Y minutes (Usually every 60 minutes).
- Digital inputs - One optional digital input when enabled, will send an alarm when contact opens.
- Vibration sensor – Sensitivity adjustable for automatic security theft alarm and motion detection
- Installation – External on top of the asset, trailer top or container top between the ribs. Secured with screws or magnets or M3 dual industrial tape.
- Internal analog temperature sensor, sends unit temperature with every GPS data transmission.
- Firmware download and configuration via USB
- Over the Air configuration via SMS
- Highly compressed OTA, UDP communication packaged with MidLink Middleware and "Plug & Play" API or DLL for quick integration into any third party software, recommended for .NET platforms.
- Or direct TCP/IP communication OTA, (no Middleware) packaged with "Plug & Play" API or DLL for quick integration into any third party software, recommended for Unix and/or Linux platforms.
- OTA Diagnostic - Communication packaged with diagnostic tools.
- Store and forward – The unit can store up to 10,000 events when out of cellular coverage then send them automatically when back in cellular coverage.
- Tow detection – The unit detects when the vehicle tilts or is moving.
- Sends battery level with every GPS data transmission.

