

ATD Tracker/Gateway Reference Device Architectures

Reduce IoT project costs and time to market with proven designs that are ready for final customization



ATD Series Reference Architectures are cost optimized, easy to customize or white label, and leverage the latest cellular, sensor, and battery technologies to deliver real time actionable data. They are the ideal foundations for IoT solutions tasked with tracking and monitoring the location and environmental condition of assets at scale across industries and use cases.

The 521 architecture is ideal for dry and refrigerated supply chain workflows requiring a Bluetooth-enabled Cat M1/NB-IoT cellular IoT gateway delivering NIST traceable detail from multiple endpoints for critical use cases.

For use cases requiring a Bluetooth-enabled Cat M1 IoT gateway with extended battery, the 600 architecture is recommended. The 600 is optimized for extended field deployment (up to 7 years). Embedded BLE technology allows for beacon scanning as well as acting like a beacon in advertise mode to conserve power during extended idle periods.

The 530 architecture is a low-cost Cat M1 option ideal for one-way destination tracking of premium or environmentally sensitive cargo. ATD reference architectures are a smart option for businesses seeking the quickest path to market without sacrificing quality or features.

Main Features

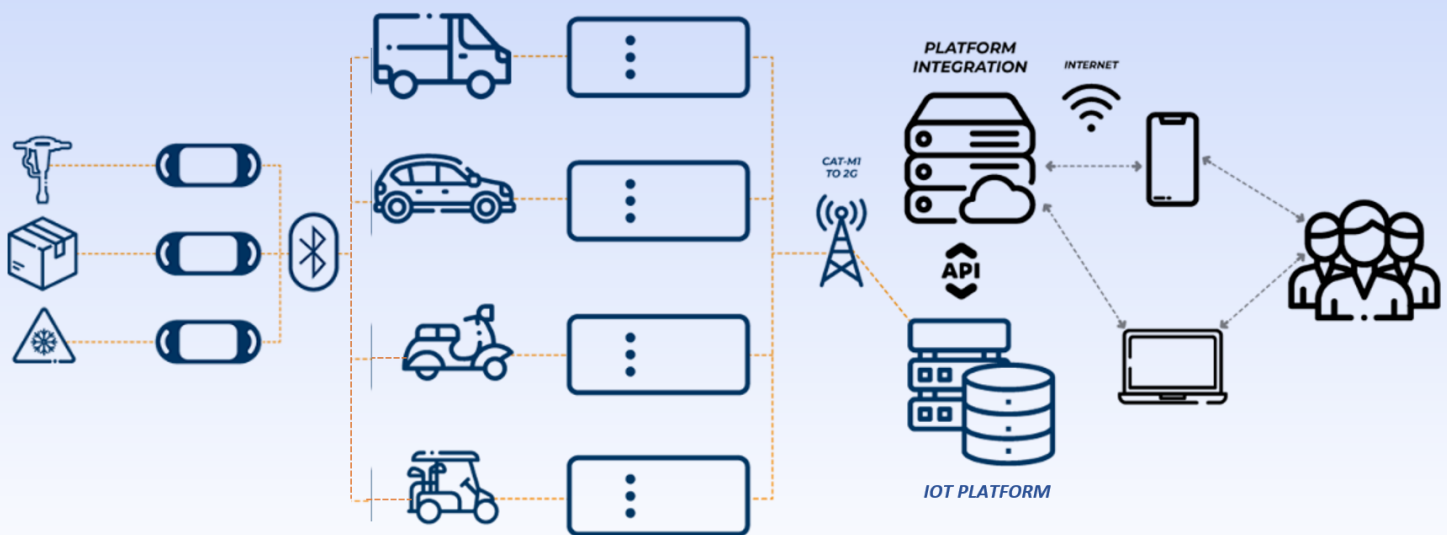
- Real-time and periodic reporting of sensor data
- Bluetooth beaconing gateway**
- Stand-alone GPS
- NIST traceable temperature and humidity monitoring*
- API setup and device management
- Over-the-air updates (FOTA)
- LaaS (indoor and outdoor location services)*
- Indoor location via BLE beacons

*Standard in 521 and 530 Architectures

**Standard in 521 and 600 Architectures

Powered Architectures in IoT Applications

Tracking and monitoring the location and condition of non-powered assets is just as important to productivity as tracking powered assets like vehicles and machinery. Nonpowered assets include generators, tanks, pallets, packages, tools, dumpsters, shipping containers, trailers, and any other equipment that cannot run under its own power supply.



Advantages and Considerations

- Large backup battery
- Up to years of battery life
- Runs solely off battery
- Real-time monitoring of battery life
- Once-a-day update when not moving
- 15-minute interval updated (when in motion)
- Weatherproof can survive all weather conditions
- No ping/locate-now option
- Goes to sleep when not connected/in use
- Best for assets that are not moved for 6+ months at a time

Which Device Architecture is Right for You?



ATD600



ATD500



ATD521



ATD530

Cat-M1
Global 2G fallback

Cat-M1
Global 2G fallback

Cat-M1/NB-IoT
Global 2G fallback

Cat-M1
Global 2G fallback

GPS, GLONASS,
BaiDou, Galileo, QZSS

GPS, GLONASS,
WiFi Laas

GPS, GLONASS,
WiFi Laas

GPS, GLONASS,
WiFi Laas

Bluetooth 5.1

Bluetooth 5.1

Bluetooth 5.1

Full IMU

3-axis
Accelerometer

3-axis
Accelerometer

3-axis
Accelerometer

6 axis IMU

6 axis IMU
Full environment

6 axis IMU
Full enviro with NIST

3-axis Accelerometer
NIST temp & humidity

25 Ah, field replaceable

4,000 mAh

3,000 mAh

2 AA, field replaceable

IP67

IP54

IP67

Polycarbonate Press Fit Tab
Assembly

300 x 70 x 35mm

122 x 60 x 23mm

85 x 50 x 20mm

107 x 60 x 20mm

FCC, ISED,
ANATEL, PTCRB

FCC, ISED, PTCRB, RoHS 2,
Verizon, T-Mobile,
US Cellular

FCC, ISED, PTCRB,
DO-160, NIST

FCC, ISED, PTCRB,
DO-160, NIST

Create Your Custom IoT Solution

Learn More

[04.2024]

Copyright © 2024 Telit IoT Solutions Holding Ltd. and/or its affiliated companies. All rights reserved.

Products, names, logos and designs described herein may in whole or in part be subject to intellectual property rights. The information contained herein is provided "as is." No warranty of any kind, either expressed or implied, is made in relation to the accuracy, reliability, fitness for a particular purpose or content in this document. This document may be revised at any time.

Telit Cinterion, Telit, OneEdge, NEXt, Cinterion and all associated logos are trademarks and/or registered trademarks of Telit Communications S.p.A, Telit Communications LTD, Telit IoT Solutions Holding Ltd. and/or their affiliated companies in the United States and/or other countries. Other names used herein may be trademarks of their respective owners.

