

# AssetLink's AssetPack-3™ (AP3™)

The AP3 global satellite tracker is one of the most versatile, two-way asset tracking, GPS and sensor monitoring solutions ever built, especially designed for unpowered assets.

The AP3 is a low profile, battery-powered, solar-recharging, rapidly reporting, fully self-contained, ruggedized, Over-The-Air (OTA) command capable, intrinsically safe, encrypted, geofence-enabled, memory-rich, GPS tracking and (optionally) cabled-sensor interface solution, that enables the reliable tracking and monitoring of any fixed or mobile asset anywhere in the world - ground, sea or air.

The AP3's solar+battery power configuration lasts the lifetime of most industrial equipment (10+ years), and is designed to survive long low sun conditions. The AP3 leverages the 100% global coverage of the Iridium satellite constellation's reliable duplex connectivity.

The AP3 is controlled OTA to change reporting schedules and behavior, control sensor endpoints, geofences, alarm thresholds, and deliver firmware upgrades. AssetLink offers zero-to-low-cost, rapid HW integration support to partners adding sensors.

Data is delivered in many methods, most often directly into partners' display portals, along with integrated APIs for OTA device configuration. All customers get access to AssetLink's AssetVision<sup>TM</sup> web-based asset and device management portal with simple display/mapping solution. Payload parsing and API documentation is available to integrators.

The AP3 is a ready-to-deploy, global tracking solution that can be active and installed in <30 seconds; no wires or cables, just an on/off magnet.

The AP3 is available to Reseller and Integrator partners globally. Contact us to start using the AP3 today.

# **FACT: The AP3 is Unique**

## No other satellite M2M device combines the following.

- Solar Battery Powered (typically 7-10 year life even transmitting every 15 minutes around the clock).
- AssetLink's satellite design experience translates into AP3's industry-leading energy management, power save, and remote access modes via satellite communications.
- Two-way satellite communications and Over-The-Air upgrade capable to grow the function of the device as needs evolve.

## Plus the Technology:

- OTA command-able and fully firmware upgradeable, and complete programming control.
- Sensors can be added or upgraded quickly, with local and OTA commanding of the sensor port for cabled attachments.
- AP3 designed for messaging reliability, fully sealed for flexible installation and and hardware certifications including NEMA6/ IP67 and C1D2 intrinsic safety.
- On-board Geofencing with thousands of points, sensor threshold alerts, motion sensor, RS485/J1939/CANBUS/ MODBUS capable.
- Highly intelligent & flexible firmware, and on-board data storage.
- AssetLink's experience in data delivery for commercial and government clients.

#### Plus the Network:

 We operate on the 100% FULLY GLOBAL Iridium satellite network - the only network that can make that claim.

#### Plus the Price:

• Price is commercial, not government.

## And that is why...

 Even Iridium tracks their satellites during land transport to manufacturing using th eAP3 tracker!





## **Specifications**

## **Form Factor**

Enclosure: 12.4" x 3.2" x 1.15" (31.50 x 8.1 x 2.9 cm)

Mass: 18.9 oz (535 g)

## **Weather Sealing**

Temperature: -20° C (-4° F) to +60° C (+140° F) operating

-40° C (-40° F) to +70° C (+158° F) extended\*

\*recharging is automatically disabled

Humidity: 100% at 50° C, salt, fog per MIL STD 810

Vibration/Shock: MIL STD 810 and SAE J1455

Water and Dust: IP67/NEMA6, waterproof, full immersion at 1m depth

#### **Power**

Battery: Solar Rechargeable Battery: 5300 mAh, 7.2VDC

Cycles: 100% DOD > 1000 cycles

Shelf life, charged: >3 years (inventory mode)

Solar Panel: Mono-crystalline silicon 6V, 1W

External Power: 10-18V, up to 500 mA

## **GPS Tracking/Management Capabilities**

Internal GPS and motion sensor with variable motion schedules

· Over-The-Air programming and real-time location request command

On-board custom geofencing, deep data logging

## **Additional Sensor Capabilities**

- All GPS tracking capabilities plus choice of up to two powered or unpowered analog or digital inputs, two 4-20 mA inputs, or two temperature sensors
- RS-485, MODBUS, CANBUS/J1939 or serial interface
- Accessories: Engine run time harness, temp sensor, panic button, door security wire, multi-functional interface cable, magnetic and door mount brackets
- Internal motion and temp sensors: Standard onboard encryption (AES optional)

## Communication

Iridium Short Burst
Data 1616-1626.5 MHz
Time Domain Duplex
TDMA/FDMA

## **GPS**

Acquisition & tracking sensitivity: -161.5 dBM

Cold start (open sky): 33s

Hot start (open sky): <2s (typical)
Position Accuracy (50% CEP): <5m

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## **Programming**

Configuration changes Over-The-Air via data portal API

## **Mounting**

VHB tape; magnet, door and screw brackets; heavy equipment cage

#### Certifications

- FCC CFR parts 15 and 25
- Industry Canada CAN ICES-3 (A) / NMB-3 (A)
   CE Mark
- ETSI EN 301 489-1 V1.9.2 & EN 300 440-2
- UL/CSA/EN/IEC 61010-1
- ANSI/ISA 12.12.01-2000 Class I. Division 2
- CAN/CSA C22.2 No. 213 Class I. Division 2



Iridium offers the only truly global communications network for mobile voice and data, connecting customers everywhere they need to be without limitation or compromise.

#### iridium.com



From container tracking to agricultural monitoring, to military applications, AssetLink Global helps customers keep track of their business assets in ways they never could before.

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