



The EVX1002 GPS Asset tag used in conjunction with EVX1000 family network gateways provides a complete automated and self-configured IoT asset tracking and wireless sensing networks.

The EVX1002 GPS Asset Tag is a long-battery life cost effective wireless tracking device with accurate GPS location that in conjunction with other tags and gateways in the EVX1000 family form a highly autonomous self-configured robust wireless tracking and sensing network for most demanding applications. The EVX1000 IoT networked-devices can operate fully untethered without any cables with global network coverage, while extend their battery life through their intelligent power management.

Applications

- Vehicle yard and gate management
- Oil & Gas operations and spill-recovery
- Construction material and equipment tracking
- Industrial operations/site management
- Mobile asset tracking and management
- High-value asset storage and automated inventory

Benefits

- Accurate location with GPS
- Easy installation
- Reliable and self-reconfiguring/ no maintenance
- No infrastructure or cables
- 10,000's feet range in multi-hop mode
- Long Battery life
- Operational in harshest environments
- Truly global EVX network coverage

Features

- Up to 1200 ft wireless range per hop
- Multi-hop tag-to-tag communication
- GPS/GNSS location with 8.2 ft (2.5 m) accuracy
- Battery powered with 2-3 years life
- Autonomous self-configuring network
- Motion activated beacon rate & control
- Operational in -40°C to 80°C
- IP67 Water Immersible

Technical Specifications EVX1002 GPS Asset Tag	
Wireless	
RF	2.4GHz , IEEE802.15.4, ISM band
Protocol	Ultra-low power optimized 6LoWPAN mesh
Range	Up 1200 ft to EVX gateway with internal compact antenna
Antenna	Internal, omni-directional, Performance not affected by mounting on metal surfaces
RF power / range	Software programmable through gateway
Beacon modes	Two modes: Stationary, In-Motion ; Different beacon rate for each mode
Beacon rate	Once every 2sec-12hrs , Software programmable through gateway
Motion Sensor	Thresholds and motion detection criteria software programmable through the gateway; Factory defaults cover most of the use cases
GPS Link	
RF	1559-1610 MHz (receive only)
Protocol	GNSS (GPS, GLONASS, QZSS and SBAS) , 56 channels GPS/QZSS L1C/A
Location accuracy	~2.5m (8.2 feet) in autonomous mode
Time to Location Fix	30 sec cold-start , 1 sec hot-start
Antenna	Internal patch, Performance not affected by mounting on metal surfaces
Power	
Battery	A' size 3.6 V primary lithium (Li-SOCl ₂), User replaceable
Battery life	2 years with 3 daily GPS updates 3 years with 1 beacon per minute no-GPS Up to 3 years with GPS smart power management and no pre-set GPS update rate
Low Battery Indicator	Through gateway to application software
Physical	
Size	5.94" x 2.59" x 1.65"
Weight	6.5oz (180 grams)
Mount	Two mounting holes for tie-wrap or screw; Optional industrial-grade back adhesive
Environment	
Enclosure	IP67 dust tight
Temperature	-40°C to 80°C
Moisture	5 feet Water immersible for >1hr
Vibrations/shock	6 feet drop on concrete; 10g random vibrations 10Hz-2kHz; Mil810



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About Evigia

Evia Systems, Inc. designs and produces innovative ultra-low power sensors, integrated wireless systems, and sensor data analytics that bring the Internet of Things to real-world business impact for organizations around the globe. Ultra-low energy usage + advanced sensing is the core of our DNA. Evigia has a proven record in design, delivery, manufacturing and support of sensing and tracking systems deployed in the most demanding applications and harshest environments. We enable organizations to put the critical IoT insights obtained from remote sensors directly into the hands of the decision-makers who need them.