GT2h

THE WORLD'S MOST VERSATILE
GLOBAL ASSET TRACKING DEVICE

SOLAR GLOBAL ASSET TRACKER - RUGGED CONSTRUCTION. LONG LASTING POWER. VERSATILE APPLICATION.

Introducing the GT2h Global Asset Tracker, one of Geoforce's industry-leading rugged industrial grade field asset tracking devices. The GT2h operates on LTE-M low-power cellular IoT networks with the ability to seamlessly transition to the Iridium global satellite network when cellular is not available. Its Bluetooth Low Energy capability supports wireless sensors and mobile device connectivity. Combining the long life delivered by solar power with the reliability of a battery backup, the intrinsically safe GT2h provides asset visibility in the most challenging conditions – even when sunlight is scarce. Its rugged design carries on the Geoforce legacy for tough and reliable devices to give you confidence your data will be available when you need it, year in and year out. Combining advanced wireless technologies and smart power management, the GT2h is the most reliable global asset tracking device ever produced.

TRACK AND TRACE

- CONTAINERS
- RAIL CARS
- ROLL-OFFS
- TRAILER CHASSIS
- TRAILERS
- CARGO UNITS
- BULK CONTAINERS
- WASTE DISPOSAL BINS
- AND MORE...

KEY PRODUCT FEATURES

The toughness of Geoforce.

- **ATEX/IECEx Intrinsically Safe Device** – Certified for use in Zone 0 hazardous environments
- **Extremely Rugged and Reliable** – Fully sealed design for long-lasting operation in the world's harshest environments

The long life of solar.

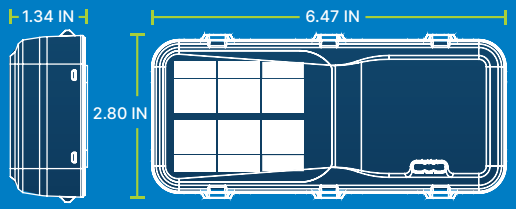
- **Up to 10 years** – Operational service life
- **Dual-Powered** - Solar rechargeable solar batteries coupled with a high-capacity non-rechargeable battery backup system provide a higher-degree of asset visibility assurance in situations where sunlight is limited or nonexistent

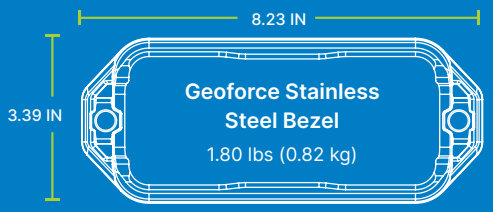
The versatility you demand.

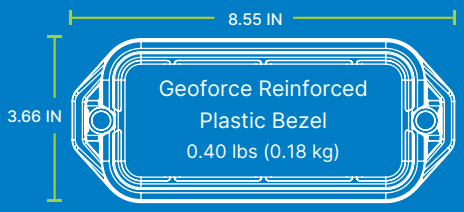
- **2-way Communication** – Over the Iridium satellite network and coverage on LTE-M networks well suited for critical data and alerts, along with remote device access and configuration when it's needed
- **Minimize Cost of Service** – While maximizing product performance by automatically selecting low-power cellular IoT when available
- **Asset Visibility Everywhere** – With automatic switch from cellular to satellite when an asset loses cellular coverage
- **Indoor Proximity Tracking** – enhanced location indoor asset tracking
- **Geoforce Software Compatible** – Including Geoforce Device Manager and Mobile Field Tool software applications to support device installation, configuration, and ongoing management
- **Quick & Easy Installation** – Installs in minutes on nearly any asset

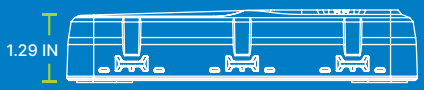
PHYSICAL

Dimensions: Length 6.5 in x Width 2.8 in x Height 1.3 in
(164.2 mm x 71.2 mm x 32.9 mm)
Device Weight: 1.2 lbs (0.54 kilograms)









ENVIRONMENTAL STANDARDS

Operating Temperature:
-40°F to 185°F (-40°C to 85°C)

Intrinsic Safe Operating Temperature:
-40°F to 149°F (-40°C to 65°C)

Recommended Storage Temperature:
41°F to 77°F (5°C to 25°C) for best results

IP Rating:
IP68 to 165ft (50m) and IP69K

High Temp Resistance:
MIL-STD-810G: 501.5 IEC60068-2-2 to 185°F (85°C)

Low Temperature Resistance:
MIL-STD-810G: 502.5, IEC60068-2-1 to -58°F (-50°C)

Combined Thermal / Humidity Exposure:
MIL-STD-810G: 507.5, 20-95%RH up to 140°F (60°C)

Solar Radiation Exposure:
UL746C F1, ASTM-G154 to 1.0 year

Salt Fog Exposure:
MIL-STD-810G: 509.5 IEC60068-2-11 to 1000 hours

Atmosphere Resistance:
ASTM D543-95, MIL-STD-810G: 518.2

Combined Operating Temp / Altitude:
MIL-STD-810G: 500.6 to 15000 ft (4570m)

Thermal Shock:
MIL-STD-810G: 503.5, 20 cycles between
-40°F to 185°F (-40°C to 85°C) < 1min transition

Impact Resistance:
ASTM D3763

Operational Vibration:
MIL-STD-810G: 514.7, IEC60068-2-80 to 7.5Grms
Random (5Hz-2000Hz)

HALT:
HALT testing guideline 993-0336 to 50Grms
(5Hz – 10000Hz, -40°F to 185°F [-40°C to 85°C])

Mechanical Shock:
MIL-STD-810G: 516.7 to 300Gpk

CERTIFICATIONS

FCC: Part 15, Part 25
Industry Canada (IC): RSS-210, 247, ICES-003 Class B
EU: RED Directive 2014/53/EU, RoHS Directive
2011/65/EU, REACH Regulation EC 1907
Australia/New Zealand RCM
Brazil ANATEL

Ordinary Locations Safety
IEC62368-1, UL 62368-1, CSA C22.2#62368-1,
UL 60950-22, CSA C22.2#60950-22

ATEX: EN 60079-0, EN 60079-11
CE II 1 G EX ia IIC T4 Ga
-40°C ≤ Ta ≤ 65°C, IP68

IECEx: IEC 60079-0, IEC 60079-11
Ex ia IIC T4 Ga
-40°C ≤ Ta ≤ 65°C, IP68

OSHA and USA Hazardous Location Classification:
UL 60079-0, UL 60079-11, UL 913
Class I, Division 1, Groups A-D, T4
Class I, Zone 0, AEx ia IIC T4 Ga
-40°C ≤ Ta ≤ 65°C, IP68

Canada Hazardous Location Safety:
CSA 22.2 No. 60079-0,11, No. 157-92
Class I, Zone 0, Ex ia IIC T4 Ga
-40°C ≤ Ta ≤ 65°C, IP68

SATELLITE NETWORK

iridium

Protocol: Iridium SBD
Frequency: 1616 MHz to 1626.5 MHz
Max Transmit Power: 1.6W

CELLULAR CONNECTIVITY

Cellular IoT Technology:
LTE-M (CAT-M1) and NB-IoT (CAT-NB1/NB2)

Device Configuration:
LTE-M (standard); NB-IoT may be considered for international markets as required by regional network availability.

POWER MANAGEMENT

Up to 10-year operational service life. The backup battery capacity provides 2 times per day reporting for up to 5 years with limited solar availability.

In storage, with the magnet installed, the backup battery will deplete at approximately 6% per year.