



geoforce GT0, GT1 Compact and Satellite Asset Tracking Device User Guide

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GT0 & GT1
Product Regulatory Guide
Document # HW-IS-0-0159
Guide Revision: 240501a
01-MAY-2024

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GT0, GT1 Compact and Satellite Asset Tracking Device



Because field operations don't have to be chaotic

APPLICABLE MODELS

This regulatory guide is applicable to the following GT0 and GT1 product model SKUs:

GT0	GT1
GT0S-GST-EXZ-SC(N) OWA1S52	GT1S-GST-EXZ-SC(N) OWA1S52

NOTICES

SUMMARY OF WARRANTY TERMS

1. – GENERAL STATEMENT OF WARRANTY

Geoforce warrants that for one year from that date that title passes to Customer for Hardware (the “Warranty Period”), the Hardware sold will be free of defects in materials and workmanship when installed, operated, and serviced in strict accordance with Geoforce’s and the manufacturer’s requirements. Geoforce will, at its sole option and at no charge to Customer, refund, repair, or send a replacement for the Hardware to the location of initial export from a Geoforce affiliate noting Customer as the importer/exporter of record (if outside the US).

2. – EXCEPTIONS FROM WARRANTY COVERAGE

This warranty does not cover: (a) Hardware that has been tampered with or serviced without Geoforce’s authorization, (b) Hardware that has been lost or stolen through no fault of Geoforce, (c) Hardware that is designed to be consumable (including batteries and battery related failures) or (d) Hardware subjected to abuse, misuse, or neglect, or (e) Hardware that has been deemed failed due to improper operational use or mis-matched to ineffective use-case by the customer.

Geoforce does not warrant that the hardware will meet customer's needs or expectations or that any piece of hardware will work on any particular networks.

ALL OTHER WARRANTIES ARE EXPRESSLY DISCLAIMED INCLUDING THE WARRANTY OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.

3. – ADDITIONAL WARRANTY TERMS

See the fully executed Geoforce purchase agreement and Statement of Warranty for a complete statement of warranty terms.

REGULATORY COMPLIANCE STATEMENT

The customer is responsible for maintaining compliance with all legal, regulatory, and safety-related requirements concerning the use of Geoforce products in the customer's applications, notwithstanding any applications related information or support that may be provided by Geoforce. Deviating from the provided installation instructions or making modifications to the equipment that are not explicitly authorized by GEOFORCE may cause the equipment to violate safety and wireless regulatory requirements, in which case, the right to operate the equipment is voided.

RIGHT TO CHANGE MATERIAL

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ABOUT THE GEOFORCE GT0 AND GT1

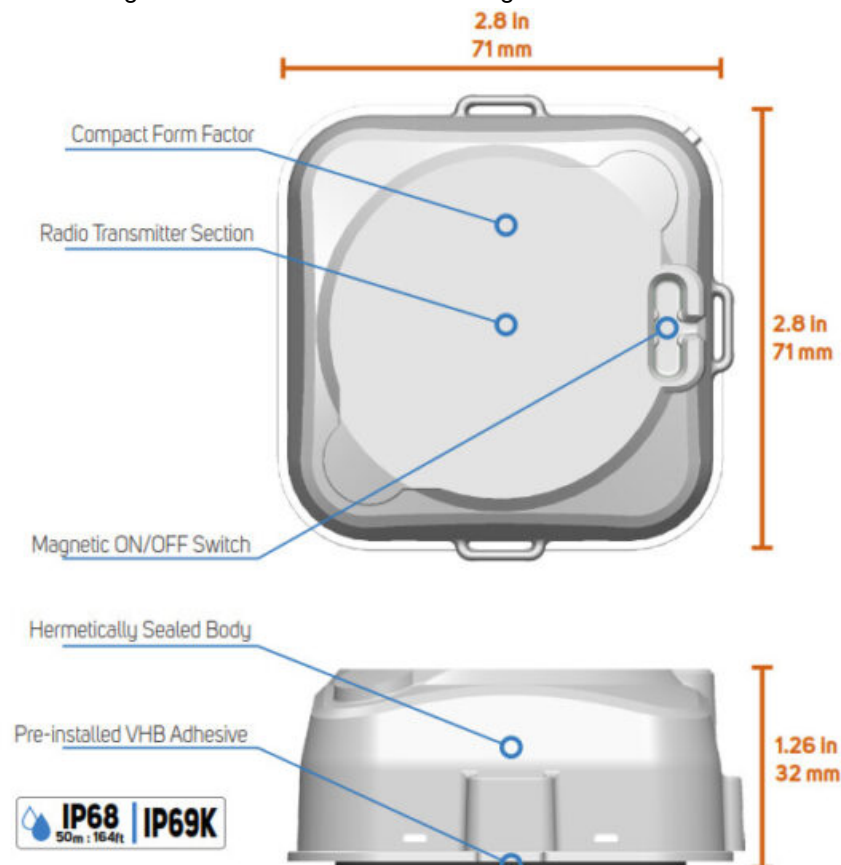
GT0

Satellite-based GPS equipment tracking has been around for years, but for many equipment types, previous hardware options were too big or expensive. With its compact size and tough build, the GT0 is ideal for all types of field equipment and shipping containers. The device, paired with Geoforce's Track and Trace web-based software, helps minimize lost revenue, recover lost and misplaced equipment, reduce underutilized equipment, verify billing, and efficiently retrieve and manage inventory.

GT1

The versatile GT1 tracks assets in locations too challenging for other GPS devices.

The GT1's unique rugged metal bezel and hermetically-sealed construction provides durable protection from extreme temperatures, forces and chemicals. The GT1 is not only the world's most rugged device, but also its safest, as it has achieved the highest IECEx/ATEX Zone 0 rating.



Shipping and Transport Guidance

TRANSPORT AND EXPORT CONTROL CODES

US ECCN-EXPORT CONTROL CLASSIFICATION NUMBER

EAR99: NON-LISTED

US CENSUS BUREAU “SCHEDULE B” CODE

8526.91.0000: RADIO NAVIGATIONAL AID APPARATUS

FOR WARRANTY RETURNS: 9801.10.0000

HTS/HS-INTERNATIONAL HARMONIZED TARIFF CODE

8526.91.0000: RADIO NAVIGATIONAL AID APPARATUS

FOR WARRANTY RETURNS: 9801.10.0000

ITAR-INTERNATIONAL TRAFFIC IN ARMS REGULATIONS

The Geoforce GTO and GT1 are not classified as a “defense article” or as “dual use” and does not require an export license under ITAR regulations.

GTO AND GT1 OPERATIONS DURING AIRLINE SHIPMENTS

The GTO and GT1 have been tested and evaluated under normal operations to DO-160G guidelines for non-interference with aircraft systems during aircraft transport. Normal operations with a single installed device are typically acceptable.

For bulk shipments the GTO and GT1 is shipped in radio silence mode.

ENABLING RADIO SILENCE MODE

Firmly insert and leave the GTO or GT1 magnet pull tab into the magnet slot on the GTO or GT1 upper housing to initiate Radio Silence.



This magnet insertion aborts any ongoing radio message event and prevents any new radio message events from starting. This is equivalent to the OFF state.

NOTE: The BLE low-power communications interface remains active while in the OFF state. During this state the maximum ERP wireless power emitted by the GTO or GT1 is 0.794 mW (-1.0 dBm) at 0.02% duty cycle.

For questions or any additional information related to GTO or GT1 operation during airline shipments and operations, contact Geoforce.

GTO AND GT1 OPERATIONS NEAR EXPLOSIVES

The GTO and GT1 have been tested and evaluated to DOE M 440.1-1 guidelines for explosives safety while being in proximity to explosives and explosive detonators.

For questions or any additional information related to GT0 and GT1 operation with explosives, contact Geoforce.

Battery Transport and Disposal Guidance

LITHIUM BATTERY REGULATORY INFORMATION

LITHIUM METAL PRIMARY CELLS



Lithium Battery Cell TypeLithium Metal Batteries Contained in Equipment

Cell ChemistryLithium-Thionyl-Chloride

Individual Cell Lithium Mass 0.66 grams

Cell Installation Method3 cells, permanently installed, non-serviceable

NOTE: GT0 and GT1 products are packaged from Geoforce in packaging acceptable for air cargo shipments of lithium batteries contained in equipment. If the GT0 or GT1 product is repackaged it is the responsibility and liability of the shipper to ship according to all applicable laws and regulations for shipping lithium batteries. Battery manufacturer's SDS is available upon request.

LITHIUM BATTERY DISPOSAL GUIDANCE

Electrochemical primary cells and batteries require special handling for disposal.

Disposal requirements are region specific and many waste handlers have further requirements that need to be followed when disposing of cells or batteries.


Primary cells and batteries can be recycled or disposed of as a hazardous waste.


General best practices that should be followed when packaging a cell or battery for disposal or recycling include:

- Secure terminals to prevent short circuiting
- Package each cell or battery in a manner that prevents shorting with the container or another cell/ battery
- Package leaking cells/batteries in a manner that contains the leak
- Use packaging material that is in compliance with local regulations
- All dented battery cells should be disposed, regardless of electrolyte leakage. Denting of sides or ends increases the likelihood of developing an internal short circuit at a later time.

Refer to the battery manufacturer's SDS for additional safety and disposal information.

ROHS (2011/65/EC, EU 2015/863), WEEE (2012/19/EU) GUIDANCE

 The Geoforce GT0 and GT1 are compliant with the Restriction of Hazardous Substances (RoHS) Directive (2011/65/EU, EU 2015/863). This signifies that all Geoforce GT0 and GT1 devices are RoHS compliant for restricted and hazardous substances. The RoHS Directive prevents all new electrical and electronic equipment placed on the market in the European Economic Area from containing more than agreed levels of lead, cadmium, mercury, hexavalent chromium, polybrominated biphenyls (PBB) and poly-brominated diphenyl esters (PBDE).

 The Geoforce GT0 and GT1 are compliant with the Waste Electrical and Electronic Equipment (WEEE) Directive (2012/19/EU) disposal symbol and is classified in the WEEE Directive as Category 9 EEE: Monitoring and Control Instruments. This signifies that all Geoforce GT0 and GT1 devices are classified as Electrical and Electronic Equipment (EEE) and should NOT be disposed of in municipal waste areas. All local regulations must be followed in the disposal and disposition process of EEE.

RF Regulatory Notices

RF TECHNICAL DECLARATIONS

Meets FCC Part 15/25 regulations, Canada ISSED, CISPR Publication 22, and Radio Eqmt. Directive 2014/53/EU

- Satellite Transmitter Maximum ERP and Operating Frequency (All models) 200 mW (23.0 dBm +/- 1.0 dBm), 1611.25 – 1618.75 MHz
- Bluetooth LE Transmitter Maximum EIRP and Operating Frequencies (All models) 2.2 mW (3.39 dBm +/- 1.0 dBm), 2402 – 2480 MHz
- GPS Receiver Frequencies Utilized (All models) 1575.42, 1602.00, 1561.00 MHz (Receive Only)



ID DECLARATIONS

GT0 & GT1 PRODUCTS

MODEL: OWA1S52

FCCID: OWA00GT1X

IC: 10540A-00GT1X

REGULATORY NOTICES

UNITED STATES FCC PART 15/25

FCC ID: OWA00GT1X

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment. The manufacturer is not responsible for any radio or television interference caused by un-authorized modifications to this equipment. Such modifications could void the user's authority to operate the equipment.

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation.

This equipment generates uses and can radiate radio frequency energy and, if not in-stalled and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/ TV technician for help.

NOTE: This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

FCC RF RADIATION EXPOSURE STATEMENT

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. End users must follow the specific operating instructions for satisfying RF exposure compliance. The antenna(s) used for this transmitter must be installed to provide a separation distance of at least 20 cm from all persons and must not be co-located or operating in conjunction with any other antenna or transmitter.

EUROPEAN UNION CE NOTICES

The GeForce GT0 and GT1 have been constructed such that the product complies with the requirement of RED Article 10.2 as it can be operated in at least one Member State as examined. Additionally, the GT0 and GT1 are compliant with Article 10.10 as it has no restrictions on being put into service in all of the EU.

Refer to the GT0/GT1 EU Declaration of Conformity (GeForce document HW-RD-0-0144) for full compliance statements.

RF Regulatory Notices

REGULATORY NOTICES



CANADA ICSED

IC: 10540A-00GT1X

Under Industry Canada regulations, this radio transmitter may only operate using an antenna of a type and maximum (or lesser) gain approved for the transmitter by Industry Canada. To reduce potential radio interference to other users, the antenna type and its gain should be so chosen that the equivalent isotropically radiated power (EIRP) is not more than that necessary for successful communication.

This Class B digital apparatus complies with Canadian ICES-003.

This device complies with Industry Canada license-exempt RSS standard(s). Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.



BRAZIL ANATEL



MEXICO IFETEL/NOM

IFETEL HOMOLOGATION NO: RCSGEGT15-1231

NOM-121 CERTIFICATE NO: 201501C06097

Safety Regulatory Guidance

ORDINARY LOCATIONS SAFETY

All Geoforce GT0 and GT1 products are conformant, recognized and certified in a variety of industrial operating environments including ordinary locations.



Conforms to:

UL STD 62368-1: 2019 Ed. 3

Certified to:

CSA STD C22.2 #62368-1: 2019 Ed. 3

CB Certified to:

IEC 62368-1: 2023 Ed. 4

EN 62368-1: 2023 Ed. 4

HAZARDOUS LOCATIONS SAFETY

In addition to Ordinary Locations operations, the following GT1 SKU codes are conformant for operation in classified Hazardous Locations:

GT1

GT1S-GST-EXZ-SC(N)

These device models are Intrinsically Safe for operation in Zone 0 environments for all Gas Groups.

Conforms to:

UL 913: 2013 Ed. 8 2022

UL 60079-0: 2019/2020 Ed. 7

UL 60079-11: 2013/2018 Ed. 6

ABNT NBR IEC 60079-0: 2013/2016

ABNT NBR IEC 60079-11: 2013/2017

Certified to:

CSA C22.2# 157: 1992 Ed. 3

CSA C22.2# 60079-0: 2019 Ed. 4

CSA C22.2# 60079-11:2014 Ed. 2

CB Certified to:

IEC 60079-0: 2017

IEC 60079-11: 2011

EN 60079-0: 2018

EN 60079-11: 2012



HAZARDOUS LOCATIONS MARKINGS APPLIED
INTRINSICALLY SAFE

APPLICABLE MODEL SKUs**GT1**

GT1S-GST-EXZ-SC(N)

IECEx CERTIFICATE NUMBER: ETL15.0026X**IECEx****Ex ia IIC T4 Ga** $-40^{\circ}\text{C} \leq T_{\text{amb}} \leq +65^{\circ}\text{C}$ IP68**INMETRO BRASIL****Ex ia IIC T4 Ga** $-40^{\circ}\text{C} \leq T_{\text{amb}} \leq +65^{\circ}\text{C}$ IP68**EU (ATEX)****ATEX CERTIFICATE NUMBER: ETL24ATEX0393X****CE 2903 Ex II 1 G Ex ia IIC T4 Ga** $-40^{\circ}\text{C} \leq T_{\text{amb}} \leq +65^{\circ}\text{C}$ IP68**UNITED KINGDOM****UK EX CERTIFICATE NUMBER: ITS21UKEX0259X****UK CA 0359 Ex II 1 G Ex ia IIC T4 Ga** $-40^{\circ}\text{C} \leq T_{\text{amb}} \leq +65^{\circ}\text{C}$ IP68**NORTH AMERICA****US NEC 500 Marking: Class I, Division 1 | Groups A-D T4****US NEC 505 Marking: Class I, Zone 0 | AEx ia IIC T4 Ga****CAN CSA Marking: Class I, Zone 0 | Ex ia IIC T4 Ga** $-40^{\circ}\text{C} \leq T_{\text{amb}} \leq +65^{\circ}\text{C}$ IP68**MARKINGS SENTENCE BREAKDOWN****Ex:**

Explosion Protection “Ex” for equipment certified for Hazardous Locations

Equipment Group:

“II” for non-mining applications

Equipment Category:

“1” for equipment suitable for Gas, Vapor, Mist and Dust Environments

Protection Method:

“ia” for Intrinsic Safety

Gas Group:

“IIC” for all Gas Groups (IIA, IIB and IIC)

Temperature Classification:

“T4”

Equipment Protection Level:

“Ga” Standard protection suitable for Zone 2 Gas Environments

Ambient Temperature Range: $-40^{\circ}\text{C} \leq T_{\text{amb}} \leq +65^{\circ}\text{C}$ Approved for EX operation within this ambient temperature range**Ingress Protection Code:**

“IP68” for Dust Tightness and Submersion to 50 meters or 164 foot depth.

HAZARDOUS LOCATIONS REGULATORY NOTICES**EX WARNING FOR ELECTRO-STATIC DISCHARGE HAZARDS FROM SURFACE RUBBING AND CLEANING ACTIVITIES:****ESD WARNING:** RISK OF ELECTRO-STATIC DISCHARGE! TO REDUCE THE RISK OF IGNITION DUE TO ELECTROSTATIC DISCHARGE, AVOID CONTACT WITH THIS PRODUCT OR PERSONNEL SHOULD PROPERLY GROUND THEMSELVES PRIOR TO TOUCHING SURFACES OF THIS PRODUCT WHILE AN EXPLOSIVE OR HAZARDOUS ENVIRONMENT IS PRESENT.**NOTE:** Synthetic fabrics used in cloths for cleaning or wiping can develop sufficient static electric charge to produce discharges capable of igniting solvent vapors. Typically, charge generation increases with the speed and vigor of the wiping action. The material being cleaned or wiped, if insulating, also can accumulate sufficient charge to produce an incendive discharge. Cotton or synthetic fabric treated with a static dissipative compound may be required if static electric charge generation needs to be controlled, especially if flammable insulating solvents are being used for cleaning or wiping.**“WARNING –** Clean with mild soap/water and a damp cloth only. Allow to dry naturally”**NOTE:** To prevent the risk of metal fires, any accessory or fastener used with the GT1 product shall possess less than 7.5% by mass of Aluminum, Zirconium, Magnesium, and Titanium in total. Any metallic accessory shall

maintain metal to metal contact with its mounting surface.

MANUFACTURER'S REGULATORY NOTICES
MANUFACTURER'S POSTAL ADDRESS INFORMATION
GEOFORCE INC.
5830 GRANITE PARKWAY, SUITE 1200
PLANO TX 75024
USA



Because field operations don't have to be chaotic

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DOC CONTROL: HW-IS-0-0159

REVISION: 240501a

Documents / Resources



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GT0S-GST-EXZ-SC N OWA1S52, GT1S-GST-EXZ-SC N OWA1S52, GT0 GT1 Compact and Sa
tellite Asset Tracking Device, GT0 GT1, Compact and Satellite Asset Tracking Device, Satellite
Asset Tracking Device, Asset Tracking Device, Tracking Device, Device

References

- [Geoforce - Asset Tracking Made for the Most Rugged Environments](#)
- [User Manual](#)

[Manuals+](#), [Privacy Policy](#)

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