Artemis Global Tracker

SPX-16469 ROHS

Well that went quickly! We hope to have more of these built and available by June 5th. Please place backorders as needed.

Could this be the one tracker to rule them all? Incorporating the Artemis Module, Iridium 9603N Short Burst Data modem, u-blox ZOE-M8Q GNSS receiver, and a TE MS8607 PHT sensor, this compact tracker will allow you to do an incredible number of things that used to be very difficult.

With a clear view of the sky, the Artemis Global Tracker (AGT) allows you to send and receive short data messages. It works anywhere in the world, including the polar regions, far beyond the reach of WiFi and GSM networks. Maybe you want to transmit pressure, temperature or humidity readings from the top of a mountain? Or use it to send data from a travelling balloon sat? Or use it to control your remote equipment out in the field. Or receive alerts if your equipment is moved out of or into a geofenced area? Perhaps you need to communicate in an emergency, when other networks might not be available? (We secretly hope that someone will be able to use AGT to track elephants, just saying)

At the heart of our product is the Arduino-compatible Artemis Module. With 1M flash and 384k RAM you'll have plenty of room for your code. The Artemis module runs at 48MHz with a 96MHz turbo mode available and with Bluetooth to boot! Of course we have included a Qwiic I2C connector so you can easily attach external sensors. You can also connect and control external devices like our Qwiic Relays remotely via Iridium messages. We have broken out the I2C and SPI pins too so you could add your own display and keypad should you want to.

The ZOE-M8Q allows the AGT to determine its location quickly and accurately with minimal current draw. We've connected the ZOE's geofence pin to the Artemis so it can generate alerts automatically if the tracker is moved into or out of up to four geofenced areas. To save weight, the ZOE and Iridium modem share a single antenna.

The on-board MS8607 pressure, humidity and temperature sensor works down to -40C and 10mbar and so is ideally suited for use in challenging environments, including airborne applications. The Artemis can be configured to read the sensor frequently and send an alert message if any of the readings go above or below preset alarm limits.

You can fully configure the AGT via its USB-C interface or remotely via an Iridium message. Want to change your geofence location or temperature alarm limit remotely? No problem! We have written a configuration tool which lets you do exactly that.

The AGT has many power options including: USB-C, a rechargeable LiPo battery or external battery pack. We've included a LiPo charger as standard. You can also add extra supercapacitors and then configure the AGT's current draw via split pads, so it will operate directly from a very small solar panel - without needing batteries!

If that wasn't enough, we've included a bunch of examples showing how to use all of the tracker's features together with Python software tools which you can use to plot the path and location of up to eight trackers on a satellite map. We'd love to hear about all the interesting uses you find for the AGT.

Note: The Iridium modem does require a monthly rental service to exchange information with the Iridium satellite network. You only pay for months in which you wish to use the modem. No annual contract is required. Line rental costs £12GBP (about $15USD) per month and includes access to the RockBLOCK management system for managing your devices. The billing system is built-in, and allows you to pay for only what you use. Airtime for Iridium modems must be purchased from Rock Seven via the admin portal once the units are registered. You cannot use the devices with another Iridium airtime provider by default. If you would like to use it with another provider, you will need to pay an unlock fee of $60USD per modem.

We do not plan to regularly produce SparkX products so get them while they're hot!

Experimental Product: SparkX products are rapidly produced to bring you the most cutting edge technology as it becomes available. These products are tested but come with no guarantees. Live technical support is not available for SparkX products. Head on over to our forum for support or to ask a question.

FEATURES

Processor:

- Artemis

Radio:

- Iridium 9603N Satellite Transceiver

Sensors:

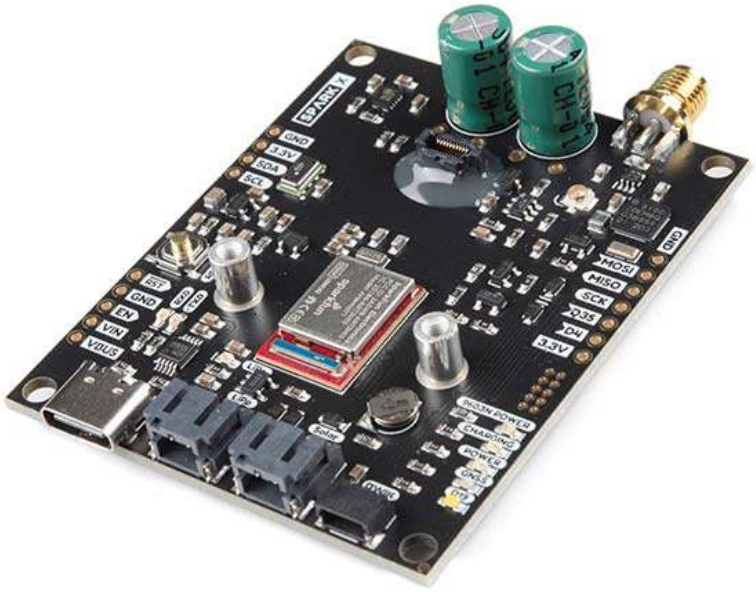
- ZOE-M8Q Ublox 2.5m accurate low power GPS
- MS8607 absolute pressure sensor

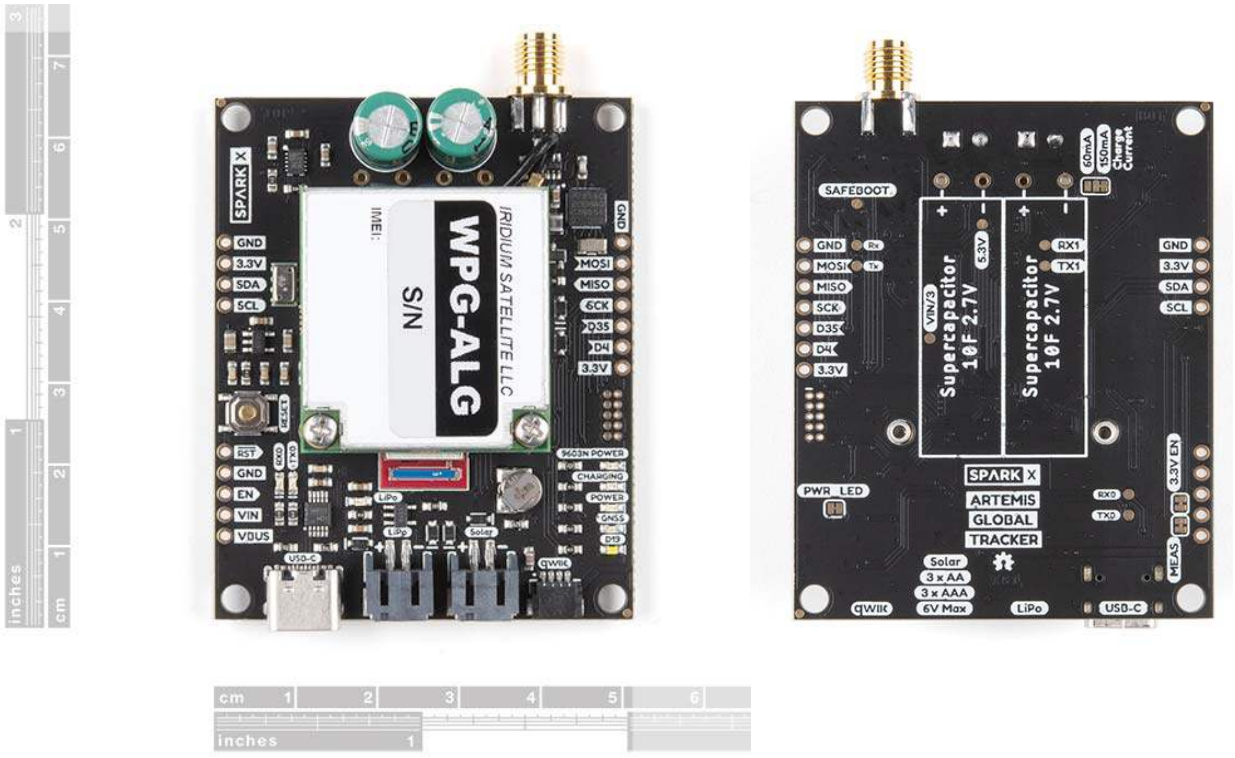
Weight:

- 30.5g as shipped with modem but no antenna
- 42.6g with Iridium Certified Passive Antenna

Dimensions:

- 2.0x2.5" (51x64mm)





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