



Name: SparkPNT TX2

Single-Line Description: Our most rugged rover; a quadband receiver housed in a waterproof aluminum enclosure with unparalleled battery life and Galileo-

SKU: GPS-29524

UPC/GTIN: 845156015467

HS Tariff Code: 8526.91.0020 **ECCN:** 7A994

Information Under Embargo Until: January 29, 2026

Description:

The Torch TX2 is a simple-to-use, high-precision GNSS receiver with millimeter-accuracy, protected inside a robust, waterproof housing. The tri-band receiver is capable of 8mm accuracy and offers robust multi-path rejection through L1/L2 and L5 reception, along with a compact helical GNSS antenna. The housing is waterproof to 1 meter for up to 30 minutes when the USB cover is closed (IP67). The RTK Torch TX2 comes in a hard-sided carrying case with lots of room for a tablet, data collector, or other device.

Packed With Modern Features

Under the hood, the SparkPNT Torch TX2 features an ESP32, an LG290P L1/L2/L5 high-precision GNSS receiver from Quectel, and the Apple authentication coprocessor for MFi compatibility. The addition of L5 reception makes this portable GNSS device ideal for densely canopied areas where normal L1/L2 reception may be unreliable.

The Torch TX2 has a rich feature set, allowing it to connect to any modern cell phone or tablet over Bluetooth. The Torch TX2 can also use WiFi to connect to corrections networks (NTRIP Client built-in) and to distribute location data over TCP.

The SparkPNT Torch TX2 kit includes everything you need: the enclosed device, thread adapter, charger, data cables, and carrying case. It does NOT include a surveying pole. Any additional items will need to be purchased separately.

Open Source

The RTK Torch runs open-source software, meaning you can fully access, view, and even modify the device's functionality. This allows for easier feature expansion, bug maintenance, and longer device longevity.

Note: All information in this document is under embargo until the 29th of January, 2026. The SparkPNT TX2 only includes what is specifically listed in the Includes section on Page 3. All other accessories will need to be purchased separately.



How the TX2 Compares to the RTK Torch

The Torch TX2 varies quite a bit from the original [Torch](#). Listening to our customers, iOS compatibility was top of mind, with LoRa and Tilt being rarely needed. The Torch TX2 is a much simpler, lower-cost device that adds iOS MFi and ArcGIS Field Maps compatibility.

Feature:	Torch TX2 (GPS-29524)	RTK Torch (GPS-25662)
GNSS Receiver:	Quectel LG290P	Unicore UM980
Bluetooth/WiFi:	✓	✓
Band Reception:	L1/L2/L5/E6	L1/L2/L5/E6
iOS MFi:	✓	✗
LoRa Radio:	✗	✓
ESP-NOW Radio	✓	✓
Tilt Compensation:	✗	✓
HAS Support:	✓	✓
Waterproof:	✓	✓
Battery Life:	50+ hrs	26+ hrs
Price:	\$1249.95	\$2149.95



Note: All information in this document is under embargo until the 29th of January, 2026. The SparkPNT TX2 only includes what is specifically listed in the Includes section on Page 3. All other accessories will need to be purchased separately.



Works With Any Corrections Network

The SparkPNT Torch TX2 works with any corrections network. If needed, SparkPNT offers PointPerfect for \$15/month. The PointPerfect Flex network operates on an SSR model, which is highly accurate, cost-effective, and free of the gaps of an OSR-based corrections network. See [OSR vs SSR](#) for more information.

Includes:

- 1x SparkPNT TX2
- 1x Hard-Shell Carrying Case
- 1x USB-A to USB-C Charging Cable
- 1x USB A and C Power Delivery (PD) Wall Adapter - 65W
- 1x Antenna Thread Adapter - 1/4in. to 5/8in.
- 1x SparkPNT Sticker

Videos:

- [Getting Millimeter-Level Location Accuracy Is Easier Than You Think](#)
- [High-Precision GNSS Without Internet? Galileo HAS Explained](#)
- [Base + Rover Setup for High-Precision GNSS in Multipath Areas](#)

Documents:

- [LG290P Datasheet](#)
- [RTK Everywhere Product Manual](#)
- [Register PointPerfect Subscription](#)
- [TX2 Schematic](#)
- [GitHub Firmware Repo](#)

Note: All information in this document is under embargo until the 29th of January, 2026. The SparkPNT TX2 only includes what is specifically listed in the Includes section on Page 3. All other accessories will need to be purchased separately.



Features:

Overall Device

- Enclosed Aluminum and Plastic Design IP67 - Protected from water up to 1 meter for 30 minutes
- Internal Antenna: L1/L2/L5 with ≥ 2.3 dBi gain
- Internal Battery: LiPo 7.2V 6.8Ah 48.96Wh with fast 10W charging
- Run time: 50+ hours on a full charge
- Single push-button control
- Weight: 428g (0.94 lbs)
- Dimensions: 71 x 71 x 147mm (2.8 x 2.8 x 5.8in)
- NGS Calibrated Antenna Phase Center (APC):
 - L1: 131.7mm
 - L2/L5: 126.2mm
 - Average: 129.0mm

Supported GIS Data Collector Software:

- SW Maps ([iOS](#) | [Android](#))
- ArcGIS ([iOS](#) | [Android](#))
- Diamond Maps ([iOS](#) | [Android](#))
- Field Genius ([Android](#))
- GNSS Master ([Android](#))
- QField ([iOS](#) | [Android](#))
- Survey Master ([Android](#))

GNSS Receiver: Quectel LG290P

- GPS: L1 C/A, L1C, L5, L2C
- GLONASS: L1, L2
- Galileo: E1, E5a, E5b, E6
- BDS: B1I, B1C, B2a, B2b, B2I, B3I
- QZSS: L1 C/A, L1C, L5, L2C
- NavIC: L5
- SBAS: L1 C/A
- L-band PPP:
 - PPP: B2b
 - QZSS: L6
 - Galileo HAS: E6
- Concurrent signal reception: 5 + QZSS
 - L1, L2, L5, E6 frequency bands
- Built-in NIC anti-jamming unit
- Tracking Channels: 1040
- Horizontal Position Accuracy:
 - Autonomous: 0.7m
 - RTK: 0.8cm + 1ppm
- Vertical Accuracy:
 - Autonomous: 2.5m
 - RTK: 1.5cm + 1ppm
- Velocity Accuracy Without Aid: 0.03m/s
- Accuracy of 1PPS Signal: 5ns (RMS)
- RTK Convergence Time: 5s
- Time to First Fix (without AGNSS):
 - Cold Start: 28s
 - Warm Start: 28s
 - Hot Start: 1.7s
- Sensitivity:
 - Acquisition: -146dBm
 - Tracking: -160dBm
 - Reacquisition: -155dBm
- Dynamic Performance:
 - Maximum Altitude: 10000m
 - Maximum Velocity: 490m/s
 - Maximum Acceleration: 4g
- Update Rate:
 - Default: 10Hz
 - Max: 20Hz
- Operating temperature: -40°C to +85°C

Note: All information in this document is under embargo until the 29th of January, 2026. The SparkPNT TX2 only includes what is specifically listed in the Includes section on Page 3. All other accessories will need to be purchased separately.



Photos:



Note: All information in this document is under embargo until the 29th of January, 2026. The SparkPNT TX2 only includes what is specifically listed in the Includes section on Page 3. All other accessories will need to be purchased separately.

X-ON Electronics

Largest Supplier of Electrical and Electronic Components

Click to view similar products for [GNSS / GPS Modules](#) category:

Click to view products by [SparkFun](#) manufacturer:

Other Similar products are found below :

[SA868-U](#) [SA828-U](#) [SA828-V](#) [ATGM336H-5N71](#) [ATGM336H-6N-22](#) [AT6668-6N-74](#) [ATGM331C-5N-31](#) [ATGM332D-6N22](#)
[LC29HEAEK](#) [LC29HBAEK](#) [NEO-M9V-20B](#) [AIW-210XU-001](#) [WISE-4610P-NA](#) [M10578-A2](#) [M10578-A3](#) [M20071](#) [M20072](#) [AS-PRO-](#)
[CORS-L125ETH-01](#) [AS-PRO-HANDHELD2-0](#) [AS-RTK-MICRO-X20P-SMATH](#) [AS-RTK-MICRO-X20P-UFLTH](#) [CMM21T-900M-N](#)
[DFR1103](#) [KIT0198-EU](#) [KIT0198-US](#) [KIT0212](#) [TEL0137](#) [TEL0138](#) [POL-3G](#) [D-GNSSoF1-1R-L12](#) [D-GNSSoF1-1T-L12](#) [Direct GPSoF](#)
[DC/DC Converter](#) [ISM3333-C6.1](#) [PNT-SG3FS-CT](#) [PNT-SG3FS-TR](#) [RXM-GPS-F4-T](#) [M003-V21](#) [M135](#) [U190](#) [A5135-H](#) [MIKROE-4150](#)
[28504](#) [L26-M33](#) [L26T-S89](#) [L70B-M39](#) [L76L-M33](#) [L76-M33](#) [L86-M33](#) [L89HA-S90](#) [L89-S90](#)