

NEON Tracking Unit Specification

The NEON Tracking Unit is a waist worn sensor accessory that supports collection and processing of sensor data to deliver 3D indoor location.



Part Number

NEON-TU8B: Bluetooth Tracking Unit
 NEON-TU8U: Ultra-Wideband Tracking Unit
 NEON-TU8B-B: Bluetooth Tracking Unit with Belt Clip

General Properties

Size	2.1 x 2.6 x 0.75" (without belt clip) 52 x 66 x 19mm
Weight	2.0 oz (without belt clip) 58 grams
Power	660 mAh internal rechargeable battery Operational use: BLE ~10 hours ¹ , UWB ~ 8 hours ²
Charging	Micro USB 500mA max charge current
Temperature	Operating -20°C to 60°C Charging 0°C to 45°C Storage -20°C to 45°C <1 month, 65 ± 20% relative humidity, non-condensing
Battery Safety	UL1642 approved cells Overcharge protection Overdischarge protection Overcurrent protection
Enclosure	Lexan Resin 121R Silicone Perimeter Gasket Designed to IP67 Designed to UL 94V-1 Designed to UL2054
Belt Clip ³	Zytel 101L NC010 ³
UWB Radio ²	3993.6 MHz Center Frequency 499.2 MHz Bandwidth -41.3 dBm Max output power

Sensors

Dead Reckoning and Context	3 Axis Gyroscope 3 Axis Accelerometer 3 Axis Magnetometer Barometric Pressure Sensor
Ranging	BLE RSSI, Compatible with iBeacon, Eddystone, and TRX beacon UWB Time of Flight ²

Environmental

Certifications

RoHS Compliant
 FCC Part 15 (Contains T7V1316, BXOTU8U²);
 IMDA (N5007-17¹, G5001-17²);
 KCC¹ (MSIP-REM-BXO-NEON-TU8B);
 IC¹ (Contains 216Q-1316);
 CE;

¹ Applies only to Bluetooth device

² Applies only to Ultra-Wideband device

³ Applies only to Belt Clip