



PulserOne

GNSS Smart Antenna



Key Features

- GNSS+INS Firmware
- Spoofing Detection
- Advanced Multipath Mitigation
- eSIM / UHF / SS Radio
- Bluetooth & Wi-Fi
- USB-C Interface & Power Delivery
- Up to 7.5-hour Swappable Battery
- Pulser Lighting System

PulserOne is a precision RTK GNSS smart antenna that combines rugged durability with cutting-edge performance. Experience effortless deployment and reliable operation enabled by eSIM technology, a patented pole-secured communication antenna, digital UHF, and GNSS+IMU fusion.

The innovative Pulser Lighting System provides intuitive at-a-glance visual feedback, clearly communicating key system status and modes.

Pair with the JAVAD Data Collector (JDC) Android app for user-friendly setup, status, and survey using RTK and patented RTPK for in-field static post-processing.

PulserOne Specifications



Tracking	Total Channels	874	
	GPS	L1 C/A, L1C, P1, P2, L2C, L5	
	GLONASS	L1 C/A, P1, P2, L2 C/A, L3	
	Galileo	E1, E5, E5A, E5B, E6	
	BeiDou	B1, B1C, B2B, B2, B2A, B3	
	QZSS	L1C C/A, L1C, L2C, L5, L6, L1S, L1Sb, L5S	
	SBAS	L1, L5	
	NavIC	L1, L5	
	L-Band	1525 - 1560 MHz	
Performance		Horizontal (m)	Vertical (m)
	Autonomous (Stand alone)	1.000	1.500
	SBAS	0.500	0.850
	DGPS	0.250	0.500
	JStar (PPP)	0.025	0.050
	RTK	0.008 + 1 ppm	0.015 + 1 ppm
	Network RTK	0.008 + 0.5 ppm	0.015 + 0.5 ppm
	Static / Fast Static	0.003 + 0.1 ppm	0.004 + 0.4 ppm
	Tilt-Compensated RTK	RTK + 5 mm + 0.5 mm / ° tilt, up to 30°	
Time to First Fix	Cold Start	< 35 s	
	Warm Start	< 5 s	
	Reacquisition	< 1 s	
	RTK Initialization	2 - 6 s	
Output Rate	Position	up to 100 Hz	
	Measurements	up to 200 Hz	
Wireless I/O	Bluetooth	v5.1, Class 2	
	Wi-Fi	2.4 & 5 GHz, 802.11 ac/a/b/g/n	
	UHF	406 - 470 MHz; 902 - 928 MHz (optional); 1 W	
	Cellular	eSIM, 4G LTE Cat-7 with 3G fallback (NAM and EMEA, APAC)	
Wired I/O	USB	USB 2.0 High Speed, Type C	
Storage	Internal Memory	64 GB	
Status/Interface	LEDs	Satellites, Position, INS, Recording, Bluetooth, Wi-Fi, Cellular, Radio, Power	
	Pulser Lighting System	28 animated LEDs for dynamic system status	
	Buttons	Power, Function	
Power	Input	+5 to +15 VDC (USB-PD), USB Type-C	
	Battery	Removeable Smart Li-Ion battery (7.2 V, 5.0 Ah)	
	Operation Time	Up to 7.5 hours	
Physical	Dimensions	144 x 144 x 108 mm	
	Weight	1.1 kg	
Environmental	Operating Temperature	-40 °C to +65 °C	
	Storage Temperature	-45 °C to +85 °C	
	Humidity	100% Condensing	
	Shock & Vibration	MIL-STD-810H; Survives 2 m drop	
	Ingress Protection	IP68	

*Refer to the user manual for full specifications.

GNSS performance is dependent on signal quality, satellite geometry, ionospheric and tropospheric conditions, baseline length, multipath effects and RF interference. Specifications may be changed without notice.