



RS-3S

GNSS Receiver Enclosure



Key Features

- 874 Channels
- Telecom Compatible
- Meteorology
- High Speed SFP Ethernet
- External Mounting
- Weatherproof Ports

The RS-3S is a high precision GNSS receiver within a rugged enclosure designed for reliable outdoor operation. It is suitable for many applications such as telecommunications, reference stations, machine control and meteorology. With a wide array of features, the RS-3S can be used as a Continuously Operating Reference Station (CORS) with a JAVAD GNSS antenna.

Number of Channels	874	
GNSS Constellations	GPS GLONASS Galileo BeiDou QZSS SBAS IRNSS L-band	L1 C/A, L1C(P+D), P1, P2, L2C(L+M), L5(I+Q) L1 C/A, P1, P2, L2C, L3(I+Q) E1(B+C), CBOC, E5A(I+Q), E5B(I+Q), AltBoc, E6(B+C) B1, B1C(P+D), TMBOC, B2B(I+Q), B2, B2A(I+Q), AltBoc, B3 L1 C/A, L1C(P+D), L1S, L1Sb, L2C(L+M), L5(I+Q), L5S, L6 L1, L5 L5, S-band 1525 - 1560 MHz
Position Accuracy	Autonomous DGPS RTK Static/Fast Static	< 2 m < 0.5 m Horizontal: 0.008 m + 1 ppm, Vertical: 0.015 m + 1 ppm Horizontal: 0.003 m + 0.1 ppm, Vertical: 0.004 m + 0.4 ppm
Time for First Fix	Cold Start Warm Start Reacquisition	< 35 s < 5 s < 1 s
Storage	Internal Memory Raw Data Rate	64 GB Up to 200 Hz
Input/Output	RF IN PWR SFP SYNC OUT EXT USB	TNC port for GNSS Antenna 4-pin Molex Ethernet, Copper/Fiber Optic, 1000 BASE-X RJ45 for RS422 + 1 PPS Wi-Fi antenna MMCX & External Sensor Nano Molex Device 2.0, Type A (slave)
Sensors	Humidity Pressure Temperature	Tolerance - 3% RH (relative humidity) Resolution - 0.008% RH Operating range - 300-1100 hPa Resolution - 0.18Pa Absolute accuracy - max 1.5°C Resolution - 0.01°C
Wireless	Wi-Fi Bluetooth	2.4 GHz & 5 GHz 802.11 a/b/g/n/ac Dual-Mode, v5.1
Power	Input Consumption	5 - 40 V DC 4.8 W typical
Physical & Environmental	Material Operating Temperature Storage Temperature Humidity Ingress Protection Vibration Dimensions Weight	Aluminum alloy -50° C to +80° C -55° C to +85° C 100% condensing IP68 High Shock & Vibration 229 x 43 x 275 mm 1.97 kg

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.