S300

GNSS RECEIVER

Precise in Positioning, Powerful in Performance.

PRECISE POSITIONING

Powered by an advanced 1408-channel GNSS engine, S300 supports full-constellation tracking across all mainstream global navigation satellite systems. Even in challenging environments, it maintains reliable centimeter-level accuracy. Combined with an upgraded high-precision gyroscope, it ensures accurate heading and smooth vehicle navigation.

INTEGRATED DESIGN

The S300 receiver brings GNSS antenna, GNSS module, gyroscope, 4G and radio together in a single compact unit. This highly integrated design minimizes installation time and enhances compatibility across various vehicle platforms, making it ideal for precision agriculture, construction equipment, and other machine-control applications.

FLEXIBLE COMMUNICATION

Designed for flexible deployment and transmission, S300 supports UHF, 4G, and RS232 interfaces for communication. With both 4G and UHF radio connectivity, the device maintains stable signal reception even in remote areas with limited network coverage. Users can also connect the receiver to control terminals for quick configuration and real-time control.

SATELLITES TRACKING

Channels	1408
BDS	B1I, B2I, B3I
GPS	L1C/A, L2P(Y)/L2C, L5
GLONASS	G1, G2
Galileo	E1, E5a, E5b
QZSS	L1, L2, L5
Initialization Time	<5s (typical)
initialization reliability	>99.9%

ACCURACY

Standalone	1.5m Horizontally
	2.5m Vertically
RTK	8mm+1ppm Horizontally
	15mm+1ppm Vertically
SBAS	<1.0 m 3D RMS
PPP	5cm Horizontally
	10cm Vertically
Velocity accuracy	0.03 m/s

DATA FORMAT

Data output format	NMEA-0183
Data update rate	10Hz
Differential data format	RTCM2.X, RTCM3.X

COMMUNICATION

4G	-LTE-FDD:B1/2/3/4/5/7/8/12/13/18/19/20/25/26/28
	- LTE-TDD: B38/39/40/41
	- WCDMA: B1/2/4/5/6/8/19
	- GSM: B2/3/5/8
UHF	- Frequency range: 410-470MHz
	- Serial Baud Rate: 9600 bps, 19200 bps, 38400 bps, 115200 bps
	- Protocol(RX): TRIMATLK TRANSEOT, TRIMMARK3, etc.
Interface	- 12-pin integrated interface,including 1 power supply, 3 RS232
	- 1 UHF connect
	- 1 SIM card slot
Indicator	2 LEDs indicating power and PPS

PHYSICAL & ELECTRICAL

Size	81*91*59mm
Weight	1.2kg
Input voltage	DC 9~28V

ENVIRONMENTAL

Working temperature	-40℃ to +65℃
Storage temperature	-40℃ to +75℃
Humidity	95% non-condensing
Waterproof & dustproof	IP67

All specifications are subject to change without notice.

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