

126.5 cm



205 mm

Size: $\varnothing 205 \times 126.5 \text{ mm}$

Weight: $\leq 2 \text{ kg}$

Features

Millimeter-level Accuracy

Compatible with multiple external sensors

Easy Configuration via Navigate Master

Support remote monitoring & management

Large 8G memory for loop recording

IP68, anti-vibration and anti-lightning for harsh environments

Support 4G/Bluetooth/UHF for flexible communication

24/7 Operation – MTBF > 50,000 hours

MA300 GNSS Receiver

DESIGNED FOR VARIOUS MONITORING TASKS

Embedded with K8-platform, MA300 GNSS receiver can reach millimeter-level positioning accuracy for precise monitoring. As a universal GNSS receiver, MA300 is compatible with multiple sensors in facing of different kinds of monitoring tasks, which is one of the best choices for monitoring solutions.

POWERFUL REMOTE CONTROL

Featuring 4G/UHF communications, MA300 receiver can easily realize device management, system upgrade, status monitoring and other configurations through remote control. Users can view positioning data and warning information anywhere and anytime via a PC or mobile phone.

RELIABLE & DURABLE FOR LONG-TIME OPERATION

Through strict quality control procedures, the MTBF of the MA300 receiver can reach more than 50,000 hours. The low-power design makes the MA300 more durable due to less heat generation of the electronic components, providing you with a long-term trouble-free operation monitoring solution.

SmartPNT[®]

By SmartPNT Technology Ltd.

Signal Tracking

Channels	965
GPS	L1C/A, L1C, L2P, L2C, L5
BDS	B1I, B2I, B3I, B1C, B2a, B2b
GLONASS	G1, G2, G3
Galileo	E1, E5a, E5b, E6c, E5 AltBOC
QZSS	L1C/A, L2C, L5, L1C
IRNSS	L5 ¹
SBAS	L1C/A

Performance Specification

Cold start	<60 s
Hot start	<15 s
Initialization time	<10 s
Signal re-acquisition	<1 s
Initialization reliability	>99.9%
Overload	15 g
Time accuracy	20 ns

Positioning Specifications

Post Processing	2.5 mm + 1 ppm Horizontal 5 mm + 1 ppm Vertical
Single Baseline RTK	8 mm + 1 ppm Horizontal 15 mm + 1 ppm Vertical
DGPS	<0.4 m RMS
SBAS	1 m 3D RMS
Standalone	1.5m 3D RMS

Interfaces

1 14-pin Lemo port	Serial port, USB port, power, switching value Support external sensors input
1 TNC connector	UHF modem
2 SIM card slots	Dual SIM dual standby

Communication

Serial port	RS232, RS485
USB	USB 2.0
UHF modem	Frequency range: 410MHz-470MHz Transmit power: 0.5-2 W adjustable Range2: 8-15 km
Bluetooth	4.1/2.1+EDR, 2.4GHz
Network	4G modem
Indicator LEDs	4 LEDs, indicating power, satellite searching, correction data and GSM status

Data Format

Correction data I/O	RTCM 2.X, 3.X, CMR (GPS only),
Position data output	NMEA-0183, RTCM2.X, RTCM3.X
Data update rate	60s, 30s, 15s, 10s, 5s, 1Hz, 2Hz, 5Hz, 10Hz

Physical

Size (L × W × H)	φ205mm*126.5mm
Weight	≤2kg
Housing	FRP cover & aluminum alloy base

Environmental

Operating Temperature	-40°C to +70°C
Storage Temperature	-55°C to +85°C
Humidity	100% No-condensing
Waterproof and Dustproof	IP68
MTBF	≥50000h

Electrical

Input voltage	6-36 VDC, overvoltage protection
Power consumption	<2 W

Software

SmartPNT CDMonitor software

Annotation

1. L5 of IRNSS is upgradeable.
2. Working distance of internal UHF varies in different environments. The maximum distance is 15 Km in ideal situation.