Hemisphere®

A326
GNSS Smart Antenna

GNSS SMART ANTENNA FOR MACHINE CONTROL SYSTEMS

atlas®

The A326 is an all-new multi-GNSS, multi-frequency smart antenna. Showcasing fast start-up and reacquisition times, and an easy-to-see status indicator for power, GNSS, and Bluetooth. The durable enclosure houses the high precision antenna element and GNSS receiver. Resulting in the A326 smart antenna being ideal for a variety of applications. The available multiple communication ports, such as Bluetooth, Wi-Fi, dual-Serial, and CAN options make the A326 compatible with almost any interface. The easy-to-use WebUI allows the user to wirelessly monitor and configure the A326 with any Wi-Fi capable device, making the A326 one of the most versatile GNSS smart antennas in the world.

Athena™ RTK

The A326 GNSS Smart Antenna uses Hemisphere GNSS' next-generation Athena RTK engine. Athena offers world class performance in the areas of initialization time, robustness in very difficult operating environments, superior performance over long RTK baselines, and exceptional reliability in scintillation conditions.

Atlas® GNSS Global Corrections

A326 is Atlas ready, and capable of receiving corrections from Hemisphere's Atlas Global Correction Service.

A326 is supported by our easy-to-use Atlas Portal (www.atlasgnss.com), which empowers you to update firmware and enable functionality, including Atlas subscriptions for accuracies from meter to sub decimeter levels.

Key Features

- Atlas GNSS Global Correction Service
- Athena RTK engine
- Powerful WebUI accessed via Wi-Fi
- Internal memory for data logging, download, and upload
- Durable enclosure is proven to withstand aggressive environments

GNSS Receiver Specifications

Receiver Type:	GNSS Position RTK Receiver
Signals Received:	GPS, GLONASS, Galileo, BeiDou, QZSS
Channels:	572 / 488
GPS Sensitivity:	-142 dBm
SBAS Tracking:	3-channel, parallel tracking
Update Rate:	10 Hz standard, 20 Hz optional (with subscription)
Timing (1 PPS) Accuracy:	20 ns
Cold Start:	< 60 s typical (no almanac, ephemeris, position, or RTC)
Warm Start:	< 30 s typical (almanac and RTC)
Hot Start:	< 10 s typical (almanac, ephemeris, position, and RTC)
Maximum Speed:	1,850 mph (999 kts)
Maximum Altitude:	18,288 m (60,000 ft)

Accuracy

Positioning:	**RMS (67%)**	**2DRMS (95%)**
Autonomous, no SA: [1]	1.2 m	2.5 m
SBAS: [1]	0.3 m	0.6 m
Atlas: [1,3]	0.08 m	0.16 m
RTK: [1,2]	8 mm + 1 ppm	15 mm + 2 ppm

L-Band Receiver Specifications

Receiver Type:	Single Channel
Channels:	1530 to 1560 MHz
Sensitivity:	-130 dBm
Channel Spacing:	5 kHz
Satellite Selection:	Manual or Automatic
Reacquisition Time:	15 sec (typical)

Communications

Ports:	2 full-duplex RS-232, CAN
Interface Level:	Atlas GNSS (WebUI)
Baud Rates:	4800 - 115200
Correction I/O Protocol:	Hemisphere GNSS proprietary ROX format, RTCM v2.3, RTCM v3.2, CMR[5], CMR+[5]
Data I/O Protocol:	NMEA 0183, NMEA 2000, Hemisphere GNSS binary, Bluetooth 2.0 (Class 2), Wi-Fi
Timing Output:	1 PPS, CMOS, active high, rising edge sync, 10 kΩ, 10 pF load
Event Marker Input:	CMOS, active low, falling edge sync, 10 kΩ, 10 pF load

Power

Input Voltage:	7-32 VDC
Power Consumption:	4.5 W nominal (L1/L2 GPS/GLONASS/ BeiDou, L-band)
Current Consumption:	0.38 A nominal (L1/L2 GPS/GLONASS/ BeiDou, L-band)
Power Isolation:	No
Reverse Polarity Protection:	Yes

Environmental

Operating Temperature:	-40°C to +70°C (-40°F to +158°F)
Storage Temperature:	-40°C to +85°C (-40°F to +185°F)
Humidity:	95% non-condensing
Mechanical Shock:	50G, 11ms half sine pulse (MIL-STD-810G w/Change 1 Method 516.7 Procedure 1)
Vibration:	7.7Grms (MIL-STD-810G w/Change 1 Method 514.7 Category 24)
EMC:	CE (ISO14982/EN13309/ISO13766/ IEC60945), Radio Equipment Directive 2014/53/EU, E-Mark, RCM
Enclosure:	IP67

Mechanical

Dimensions:	15.8 L x 15.8 W x 7.9 H (cm) 6.2 L x 6.2 W x 3.2 H (in)
Weight:	< 1.15 kg (< 2.53 lbs)
Status Indications (LED):	Power, GNSS Status, Bluetooth, Wi-Fi
Power/Data Connector:	12-pin male
Antenna Mounting:	1-14 UNS-2A female adapter, 5/8-11 UNC 2B adapter, flat mount available

1. Depends on multipath environment, number of satellites in view, satellite geometry, and ionospheric activity
2. Depends also on baseline length
3. Requires a subscription from Hemisphere GNSS
4. With L5 option 5 With B3 option
5. CMR and CMR+ do not cover proprietary messages outside of the typical standard

Hemisphere®

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