A326 GNSS Smart Antenna

GNSS Smart Antenna for Machine Control Systems

- Atlas® GNSS Global Correction Service
- Athena™ RTK engine
- Powerful WebUl accessed via Wi-Fi
- Internal memory for data logging, download, and upload
- Environment-proven enclosure for the most aggressive user scenarios



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, 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.



A326 GNSS Smart Antenna

GNSS Receiver Specifications

GNSS Position RTK Receiver Receiver Type:

Signals Received: GPS, GLONASS, Galileo, BeiDou, QZSS

Channels: 4,5 572 / 488 GPS Sensitivity: -142 dBm

SBAS Tracking: 3-channel, parallel tracking

Update Rate: 10 Hz standard, 20 Hz optional (with

subscription)

Timing (1PPS) Accuracy: 20 ns

Cold Start: < 60 s typical (no almanac, ephemeris, position, or RTC)

< 30 s typical (almanac and RTC) Warm Start: < 10 s typical (almanac, ephemeris, Hot Start:

position, and RTC) Maximum Speed: 1,850 kph (999 kts) Maximum Altitude: 18,288 m (60,000 ft)

Positioning Accuracy

Horizontal Accuracy: RMS (67%) 2DRMS (95%) RTK: 1,2 15 mm + 2 ppm

8 mm + 1 ppm L-Band: 1,3 0.08 m 0.16 m SBAS (WAAS): 1 $0.3 \, \text{m}$ 0.6 m

Autonomous, no SA: 1 1.2 m 2.5 m

L-Band Receiver Specifications

Single Channel Receiver Type: 1530 to 1560 MHz Channels:

Sensitivity: -140 dBm Channel Spacing: 5.0 kHz

Manual and Automatic Satellite Selection: Reacquisition Time: 15 seconds (typical)

Communications

Serial Ports: 2 full-duplex RS-232, CAN Atlas GNSS (WebUI) Interface Level:

4800-115200 Baud Rates:

Correction I/O Protocol: Hemisphere GNSS proprietary, RTCM

v2.3 (DGPS), RTCM v3 (RTK)

Data I/O Protocol: NMEA 0183, NMEA 2000, Hemisphere

GNSS binary, Bluetooth 2.0 (Class 2),

Wi-Fi

Timing Output: 1PPS, CMOS, active high, rising edge

sync, $10 \text{ k}\Omega$, 10 pF load

Event Marker Input: CMOS, active low, falling edge sync,

 $10 \text{ k}\Omega$, 10 pF load

Power

Input Voltage: 7-32 VDC

4.5 W nominal (L1/L2 GPS/GLONASS/ Power Consumption:

BeiDou, L-band)

Current Consumption: 0.38 A nominal (L1/L2 GPS/GLONASS/

BeiDou, L-band)

No

Yes

Environmental

Protection:

Power Isolation:

Reverse Polarity

Operating Temperature: -40°C to +70°C (-40°F to +158°F) -40°C to +85°C (-40°F to +185°F) Storage Temperature:

Humidity:

EMC:

Mechanical Shock:

Vibration:

7.7Grms (MIL-STD-810G w/Change 1

Method 514.7 Category 24)

Procedure 1)

CE (ISO14982/EN13309/ISO13766/

95% non-condensing

IEC60945), Radio Equipment Directive

50G, 11ms half sine pulse (MIL-STD-

810G w/Change 1 Method 516.7

2014/53/EU, E-Mark, RCM

Enclosure: IP67

Mechanical

Dimensions:

Weight:

Status Indications (LED): Power/Data Connector:

Antenna Mounting:

15.8 L x 15.8 W x 7.9 H (cm)

6.2 L x 6.2 W x 3.2 H (in) < 1.15 kg (< 2.53 lbs)

Power, GNSS Status, Bluetooth, Wi-Fi

12-pin male

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

Authorized Distributor:

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