

# A326 GNSS Smart Antenna

## OEM Hardware for Machine Control Systems

### key features

- Atlas® L-band corrections
- Athena™ RTK engine
- Powerful webUI accessed via Wi-Fi
- Internal memory for data logging, download, and upload
- Environment-proven enclosure for the most aggressive user scenarios



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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 both antenna and receiver. It can be powered through various sources, making the A326 smart antenna ideal for a variety of applications. Using multiple communication ports, such as Bluetooth, Wi-Fi, dual-Serial, and CAN options make this A326 compatible with almost any interface. The easy-to-use webUI allows you to wirelessly configure your A326 with any web capable device, making the A326 one of the most customizable smart antennas in the world.

#### **Athena RTK**

The A326 GNSS smart antenna supports Athena, our new core GNSS engine. Athena offers significant improvements in the areas of initialization time, robustness in very difficult operating environments, performance over long baselines, and performance under scintillation.

#### **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](http://www.AtlasGNSS.com)), which empowers you to update firmware and enable functionality, including Atlas subscriptions for accuracies from meter to sub-decimeter levels.



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[www.HGNS.com](http://www.HGNS.com)

# A326 GNSS Smart Antenna

## GNSS Receiver Specifications

Receiver Type:	Dual-frequency, multi-GNSS RTK	
Signals Received:	GPS, GLONASS, and BeiDou	
Channels:	372	
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)	
Warm Start:	< 30 s typical (almanac and RTC)	
Hof Start:	< 10 s typical (almanac, ephemeris, 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: <sup>1,2</sup>	10 mm + 1 ppm	20 mm + 2 ppm
L-Band: <sup>1,3</sup>	0.08 m	0.16 m
SBAS (WAAS): <sup>1</sup>	0.3 m	0.6 m
Autonomous, no SA: <sup>1</sup>	1.2 m	2.5 m

## L-Band Receiver Specifications

Receiver Type:	Single Channel
Channels:	1530 to 1560 MHz
Sensitivity:	-130 dBm
Channel Spacing:	5.0 kHz
Satellite Selection:	Manual and Automatic
Reacquisition Time:	15 seconds (typical)

## Communications

Serial Ports:	2 full-duplex RS-232, CAN
Interface Level:	Atlas GNSS (webUI)
Baud Rates:	4800-115200
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 low, falling edge sync, 10 k $\Omega$ , 10 pF load
Event Marker Input:	CMOS, active low, falling edge sync, 10 k $\Omega$ , 10 pF load

<sup>1</sup> Depends on multipath environment, number of satellites in view, satellite geometry, and ionospheric activity

<sup>2</sup> Depends also on baseline length

<sup>3</sup> Requires a subscription from Hemisphere GNSS

Authorized Distributor:

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## Power

Input Voltage:	7-32 VDC with reverse polarity operation Korea: 12 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
Antenna Voltage:	Internal Antenna

## 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
Shock and Vibration:	Mechanical Shock: EP455 Section 5.41.1 Operational Vibration: EP455 Section 5.15.1 Random CE (ISO 14982 Emissions and Immunity), FCC Part 15, Subpart B, CISPR 22 IP67
EMC:	
Enclosure:	

## 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) < 1.15 kg (< 2.53 lbs)
Weight:	
Status Indications (LED):	Power, GNSS Lock, Bluetooth
Power/Data Connector:	12-pin male (metal)
Antenna Mounting:	1-14 UNS-2A female adapter, 5/8-11 UNC 2B adapter, flat mount available



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