AtlasLink™ GNSS Smart Antenna

Expand Your World

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**

atlas

AtlasLink is an all-new multi-GNSS, multi-frequency smart antenna preconfigured to receive corrections from Hemisphere's Atlas global corrections service. AtlasLink paired with Atlas provides you with the easiest way to receive Atlas corrections via the industry's most powerful multipurpose GNSS smart antenna, either directly from AtlasLink or into your existing receiver.

No longer be tied to a single corrections provider requiring you to purchase their corrections, which can only be received by their device. Whether you utilize Atlas corrections data on equipment that doesn't have the ability to receive L-band signals, or you would like to use Atlas corrections on systems that currently receive L-band corrections from another source, you now have the freedom to do so. AtlasLink, in SmartLink™ or BaseLink™ mode, enables you to utilize Atlas corrections on any receiver from any vendor that supports industry-standard correction formats.

AtlasLink 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.

Hemisphere®

precision@hgnss.com
www.hgnss.com

AtlasLink 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)
Hot 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: [1,2]	10 mm + 1 ppm	20 mm + 2 ppm
L-Band: [1,3]	0.08 m	0.16 m
SBAS (WAAS): [1]	0.3 m	0.6 m
Autonomous, no SA: [1]	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 kΩ, 10 pF load
Event Marker Input:	CMOS, active low, falling edge sync, 10 kΩ, 10 pF load

Power

Input Voltage:	7-32 VDC with reverse polarity operation
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
EMC:	CE (ISO 14982 Emissions and Immunity), FCC Part 15, Subpart B, CISPR 22
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 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

[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

Authorized Distributor:

Rev. 9/16

Hemisphere

Hemisphere GNSS, Inc.
8515 E. Anderson Drive
Scottsdale, AZ, USA 85255

Toll-Free: +1-855-203-1770
Phone: +1-480-348-6380
Fax: +1-480-270-5070
precision@hgnss.com
www.hgnss.com