

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



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.



precision@hgns.com
www.hgns.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) | |
| 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: ^{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 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: | < 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

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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@hgns.com
www.hgns.com