

PRECISE AGRICULTURE GNSS RECEIVER FOR PASS-TO-PASS SYSTEMS



INTEGRATED DESIGN

AG-Dream-mini is a technical device with OEM GNSS module and high-end antenna integrated into a single high-strength, sheltered housing. The unit is specially designed for use in harsh environments and equipped with a simple but very strong magnetic mount (fixed mounting 5/8" is also available optional).

PRECISE PERFORMANCE

AG-Dream-mini provides 14 channels for L1 GPS C/A code and phase tracking. The unit is optional software upgradable to track L1 GLONASS code and phase. Two channels can be configured for SBAS signals (WAAS, EGNOS and MSAS, available on standard models). Measurement and position data (coordinates, velocity and time) are provided at 1 Hz or 10 Hz (optional).

SMOOTH, PASS-TO-PASS ACCURACY WITH GLIDE™

NovAtel's exclusive GLIDE technology provides ultra-smooth position solutions allowing you to achieve centimeter level positioning accuracy. GLIDE filter produces a very smooth high-precision relative positioning solutions, not absolute coordinates. It is optimally suited for applications, requiring high, but short-term repeatability of the coordinate solutions, such as agricultural guidance.

INTEGRATED BLUETOOTH® CONNECTIVITY

AG-Dream-mini is available with optional Bluetooth technology to provide wireless connectivity.

MULTIPLE INTERFACES

NMEA 0183 and detailed NovAtel ASCII and binary logs can be sent to RS-232 serial port or optional Bluetooth and also to USB port. AG-Dream-mini provides two status LEDs: Power and Position valid indicators. Also optional Bluetooth indicator is available to order.

BENEFITS

The optimal cost-effective solution for agricultural guidance

Embedded NovAtel GLIDE technology: the special filter offers superior pass-to-pass performance for applications, where relative positioning is critical

Capability to track GPS, SBAS and GLONASS (optional)

Wide input voltage range plus the ability to power via USB port



AG-Dream-mini™

SPECIFICATIONS

Channel Configurations

Standard model

14 GPS L1

12 GPS L1 + 2 SBAS

Optional

10 GPS L1 + 4 GLONASS L1

8 GPS L1 + 6 GLONASS L1

8 GPS L1+4 GLONASS L1+2 SBAS

10 GPS + 2 GLONASS + 2 SBAS

7 GPS L1 + 7 GLONASS L1

Measurement Precision (RMS)

	GPS	GLO
L1 C/A Code	5 cm	35 cm
L1 Carrier Phase	0.6 mm	1.5 mm

Horizontal Position Accuracy (RMS)

Autonomous L1	1.5 m
SBAS	0.9 m
DGPS	0.5 m

Iterative Position Solution Accuracy (GLIDE)

Centimetre level

Data Rate

Standard model

Measurements 1 Hz

Position 1 Hz

Optional

Measurements 10 Hz

Position 10 Hz

Time to First Fix

Cold Start < 85 s (typical)

Hot Start < 55 s (typical)

Signal Reacquisition

<1.0 s (typical)

Velocity Accuracy

0.05 m/s (RMS)

Time Accuracy 20 ns (RMS)

PHYSICAL AND ELECTRICAL

Dimensions

120 mm diameter × 70 mm height

Weight

440 g

Connector

Common connector: power+ interfaces, round, 7-pin, full hermetic

Mounting

3 neodymium magnetic mounts screw – 5/8" (optional)

Power

USB 5 VDC

External Feeding 6...36 VDC

Power Consumption <1 W

Status LEDs

Power

Position Valid

Bluetooth (optional)

ENVIRONMENTAL

Temperature

Operating - 40 ... +65°C

Storage - 50 ... +75°C

Humidity

Short-time immersion to depth of maximum 2m

High protection against shock and vibration

COMMUNICATION PORTS

1 RS-232 serial port

1 USB

1 Bluetooth (optional)

STANDARD FEATURES

- NovAtel on-Board technology
- 1 Hz data rates (measurements, position, velocity and time)
- GPS L1 position, velocity and time with SBAS support
- GLIDE technology
- PAC multipath mitigating technology
- Field upgradable software
- Differential correction support for RTCM 2.1, 2.3, 3.0, 3.1, CMR, CMR+ and RTCA
- Navigation output support for NMEA 0183 and detailed NovAtel ASCII and binary logs

STANDARD CONFIGURATION

AG-Dream-mini 1pc

Multifunctional cable (3m) 1pc

Warranty 24 months



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Available models:

AG-Dream-mini-1Hz: L1 GPS (code & carrier phase), 14 channels, SBAS, DGPS, GLIDE, measurement & position output, 1 Hz (base model)

AG-Dream-mini-PVT: L1 GPS, 14 channels, SBAS, DGPS, without GLIDE, without measurement output, position output, 1 Hz (mobile application)

AG-Dream-mini-1Hz-G: L1 GPS+GLONASS (code & carrier phase), 14 channels (7+7 as standard), SBAS, DGPS, GLIDE, measurement & position output, 1 Hz

AG-Dream-mini-10Hz: L1 GPS (code & carrier phase), 14 channels, SBAS, DGPS, GLIDE, measurement & position output, 10 Hz

AG-Dream-mini-10Hz-G: L1 GPS+GLONASS (code & carrier phase), 14 channels, SBAS, DGPS, GLIDE, measurement & position output, 10 Hz

Add "B" – for Bluetooth option order