GNSS Receiver AG-200

Key features

- Worldwide available ViewPoint RTX correction service
- High availability due to multi-constellation GNSS tracking
- Supports GPS, GLONASS, Galileo, BeiDou, GZSS
- SBAS+
- Compact and flat design
- Universal magnetic mount

The smart AG-200 GNSS receiver is designed for agricultural applications where high availability is required, e.g. for section control, variable rate control, assisted guidance and field navigation. The universal magnetic mount allows quick and easy installation on any machine. The receiver addresses both current and future communication needs with multiple CAN Bus and serial interfaces.

GNSS receiver specifications

Receiver type	L1 multi-constellation GNSS receiver
GNSS signals	GPS, GLONASS, Galileo, BeiDou, QZSS
Satellite tracking	58 GNSS satellites 1 SBAS satellite 1 MSS/L band correction satellite
SBAS support	WAAS, EGNOS, GAGAN, MSAS
MSS band support	ViewPoint RTX correction service
Cold start	<60 s (no almanac, position and time)
Warm start	<30 s (almanac, approximate position and time, no ephemeris)
Hot start	<15 s (ephemeris, approximate position and time)
Maximum speed	515 m/s (1,854 km/h)
Minimum speed	0.3 km/h
Maximum height	18,000 m (48,600 ft)
Installation	Universal magnetic mount
Humidity	5-100 % condensing
Shock resistance	ISO 15003
Input/Output protection	Overvoltage and short-circuit protection
Dimensions	180 mm diameter, 74 mm height
Weight	640 g (22.6 oz)
LED	Multi-colour LED
Connector	Deutsch DTM-12P (Coding A)

Power

Input voltage	9-16 V DC
Power input	3.0 W
Current consumption	250 mA @ 12 V

Environmental conditions

Operating temperature	-30 °C - + 70 °C
Storage temperature	-40 °C - + 85 °C
Ingress protection code	IP66

Horizontal position accuracy*

	Pass to pass	Absolute
Autonomous	30 cm	>100 cm
SBAS	20 cm	<100 cm
ViewPoint RTX	15 cm	<100 cm

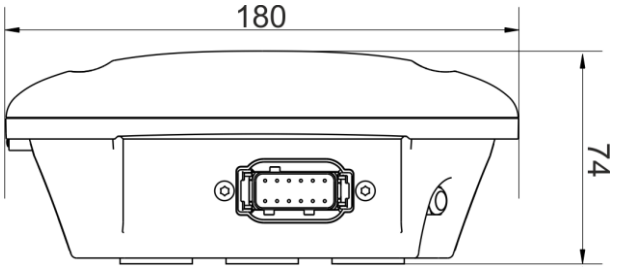
*68 % (RMS) 1-dimensional horizontal performance based on repeatable in field measurements.

Achievable accuracy and initialization time may vary based on type and capability of receiver and antenna, user's geographic location and atmospheric activity, scintillation levels, GNSS constellation health and availability and level of multipath including obstructions such as large trees and buildings.

Pass to Pass measurements are within 15 minutes.

Connectivity

Serial interfaces	2 serial interfaces (4,800-115,200 bps)
CAN interfaces	2 full duplex CAN interfaces with 120 Ohm termination
Analog/Digital inputs and outputs	Emulated radar output (speed out)
NMEA 0183 output frequency	1, 5, 10 Hz



Schematic illustration

Pin assignment 12-pin Deutsch connector

Pin	Signal
1	CAN_1_H
2	RS-232-TX
3	RS-232_RX
4	AD I/O_1 (Default) / PPS (Firmware selectable)
5	Signal 0 VE
6	CAN_2_H
7	CAN_2_L
8	RS-232_2_TX
9	AD I/O / RS-232_2_RX (Default) (Resistor selectable)
10	V+ In/Out
11	V- In/Out
12	CAN_1_L