

A100 Smart Antenna The Affordable All-In-One DGPS Receiver Solution





Work smarter, not harder. The A100™ Smart Antenna offers an affordable, portable solution with professional level accuracy for agricultural, marine, GIS mapping, and other applications.

Focus on the job at hand with fast start-up and reacquisition times, 60 cm accuracy, and an easy-to-see status indicator for power, GPS, and DGPS. The durable enclosure houses both antenna and receiver. It can be powered through various sources, making the A100 Smart Antenna ideal for a variety of applications. Dual-serial, CAN, and pulse output options make this DGPS receiver compatible with almost any interface.







Hemisphere GPS products are powered by Crescent Receiver Technology, today's standard in precision GPS.





Key A100 Smart Antenna Advantages

- Affordable solution for unparalleled Fast output rates of up to 20 times sub-meter performance - 60 cm accuracy, 95% of the time
- COAST™ technology maintains accurate solutions for 40 minutes or more after loss of differential signal
- Exclusive e-Dif® option where other differential signals are not practical
- · Compatible with our exclusive L-Dif™ technology, for applications requiring accuracy better than 20 cm
- per second provide the best visual guidance and automated steering signals for all types of applications
- Compact, low-profile design with fixed or magnetic mounting options is ideal for portable and dynamic applications
- Radar-simulated pulse output provides accurate ground speed



A100 Smart Antenna

GPS Sensor Specifications

Receiver Type: L1, C/A code, with carrier

phase smoothing (patented COAST technology during differential signal

outage)

Channels: 12-channel, parallel tracking

(10-channel when tracking SBAS)

Differential Options: SBAS (WAAS, EGNOS, MSAS)

e-Dif, L-dif

Update Rate: Up to 20 Hz position

Horizontal Accuracy: < 0.6 m 95% confidence (DGPS)*

< 2.5 m 95% confidence (autonomous, no SA)**

Start Up Time: 60 s (no almanac or RTC)

Satellite Reacquisition: < 1 s

Communications

Serial Ports: 2 full duplex RS232 CAN: NMEA 2000 broadcast

Pulse Output: 1 PPS (HCMOS, active high, rising

edge sync)

Baud Rates: 4800 - 115,200 Correction I/O Protocol: RTCM SC-104 v2.x

Data I/O Protocol: NMEA 0183, SLX binary, NMEA 2000 Ground Speed Output: Range: 0.5 - > 200 mph (0.8 - > 322 km/h)

Signal: pulse out

Frequency Conversion: 94 Hz/m/s

Event Mark: HCMOS, active low, falling edge sync,

10k ohm, 10pf load

Wireless: Bluetooth, via optional external interface

Environmental

Operating Temperature: -30°C to +70°C (-22°F to +158°F) Storage Temperature: -40°C to +85°C (-40°F to +185°F)

Enclosure: Waterproof, dustproof

Compliance: FCC, CE

Power

Input Voltage: 7 - 36 VDC

Power Consumption: < 2 W @ 12 VDC typical Current Consumption: 150 mA @ 12 VDC typical

Mechanical

Weight:

Dimensions: 54.7 mm H x 129.5 mm W

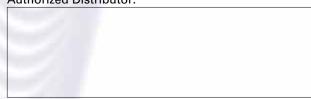
(2.2" H x 5.1" W) 0.66kg (1.45 lbs.)

Mounting Options: Magnetic mount

Fixed mount - low or high profile (5/8 inch or no. 8-32 screws)



Authorized Distributor:



- Depends on multipath environment, number of satellites in view, satellite geometry, baseline length (for local services) and ionospheric activity
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