

# 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 - 57600
Correction I/O Protocol:	RTCM SC-104
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

Dimensions:	54.7 mm H x 129.5 mm W (2.2" H x 5.1" W)
Weight:	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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