

# NMEA 0183 GPS Receivers

## Three Surprisingly Affordable GPS Receiver/Antennas

1. Standard GPS with 1-second (1Hz) update rate
2. Fast Update GPS with 1/10 second (10Hz) update
3. Fast Update GPS with 1/10 second (10Hz) update that outputs 8- or 16-pulse signal to drive existing electrical automotive or commercial speedos on the market



Description	Part Number
Standard update with 4 ft harness and ring terminals	GPSSQ3
Fast 10 Hz 10x update with 4 ft harness with ring terminals	GPSSQ310X
Fast 10 Hz 10x update -8/16 pulse output with 4 ft harness and ring terminals to connect to threaded #8-32 studs on existing automotive or commercial electric speedos (Non -GPS speedo heads)	GPSESQ3

### HIGHLIGHTS

- 1Hz unit outputs NMEA0183 data at 4800 baud, 8 data bits, 1 stop bit, no parity (NMEA 0183 standard).
- 10Hz unit outputs same NMEA messages at 38,400 baud.
- Receiver output is a differential signal to meet NMEA 0183 specs. [The input on the speedo head is an opto-coupled NMEA0183 differential input].
- Operating voltage is 10-32V DC; unit typically consumes <50mA at 12V.
- Operating temperature -30 to +85°C, storage -40 to +125°C.
- Cold/warm/hot start times are <35/<34/<1 seconds.
- 66 channels for acquisition, 22 for simultaneous tracking.
- Position accuracy is "<3m CEP (50%) without SA (horizontal)" or "3.0m 2D RMS".
- Velocity accuracy is "0.1m/s without aid".
- The default NMEA output messages are GGA, GSA, RMC, VTG, and GSV
- For 8/16 pulse unit only: The pulse output is a square wave, low voltage should be <0.5V, high voltage will be (supply-0.5)V.