

Brochure

VIAVI

GPSG-1000

GPS/Galileo Portable Positional Simulator

An economical simulator with high-end test capability, ideal for validating the performance of GPS enabled devices.

The VIAVI GPSG-1000 is a software upgradable, single carrier, multi-channel simulator. This versatile, time-saving test set is designed for GPS/Galileo receivers, including WAAS/EGNOS SBAS (satellite based augmentation systems) simulation.

The GPSG-1000 provides 3D positional simulation and allows any combination of visible SV's to be selected. One or two channels may be allocated to SBAS simulation.



Features

- GPS signals simulated: L1, L1C*, L2C*, L5*
- Galileo signals simulated: E1, E5**, E5a**, E5b**
- Static and dynamic simulations
- NMEA-0183 File Record and Playback functionality
- 12 channel configuration (RAIM supported)
- Programmable space vehicle (SV) parametrics and health
- User or built-in GPS receiver referenced time and date
- Remote control interface via Ethernet

*Some receivers require synchronized L1 transmissions.

**Some receivers require synchronized E1 transmissions.

Benefits

- Simultaneous GPS/Galileo simulation
- Software/firmware upgradeable
- PVT (position, velocity, time) data available via RS-232

Applications

- General testing of civil GPS and Galileo receivers
- Testing of non-encrypted military GPS receivers
- Positive Train Control
- Asset tracking and telematics
- TAWS / WAAS / GBAS / LPV / ADS-B

Ordering Information

Versions and Options

| Order Number | Description |
|--------------|---|
| 87339 | GPSG-1000 12 Satellite Simulator NSN: 6625-01-616-2712 |
| 140607* | GPSGOPT3 ADS-B Integrity Test Option |

*Includes cables and accessories

Standard Accessories

| | |
|-------|--------------------------------|
| 88493 | Transit case (qty 1) |
| 67374 | Power supply |
| 87636 | Antenna coupler |
| 90113 | RX antenna |
| 90114 | Cable, coax. 50 ft. |
| 62302 | Power cord (U.S.) |
| 64020 | Power cord (European) |
| 88753 | Coupler shot bag |
| 88037 | Operation Manual (CD) |
| 88038 | Getting Started Manual (paper) |

Optional Accessories

| | |
|--------|--|
| 141193 | GC-130 GPS Antenna Coupler Kit |
| 91136 | Kit, CPLR dual GPS antenna system |
| 91137 | Kit, CPLR triple GPS antenna system |
| 113108 | Kit, GPS receiver termination, 190 Ohms |
| 90106 | Kit, antenna coupler placement pole, 8 ft. |
| 87040 | External battery charger |
| 86196 | Spare battery pack |
| 89023 | Maintenance Manual (CD) |

Extended Warranty (2 year standard)

| | |
|-------|--------------------------------------|
| 89768 | 36 months with scheduled calibration |
| 89769 | 60 months with scheduled calibration |

Physical Characteristics

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|-------------------------------|--|
| Dimensions (Test set only) | 11.22 x 15.15 x 3.54 in (28.5 x 38.5 x 9 cm) |
| Dimensions (Shipping Case) | 20.8 x 31.5 x 13 in (53 x 80 x 33 cm) |
| Weight | 15.5 lbs., 7.03 kg (test set only) 52 lbs., 23.5 kg (shipping weight) |

Environmental

| | |
|-----------------|---------------------------------|
| Operating Temp. | -20° to 55°C (-4° to 131°F) |
| Storage Temp. | -30°C to 71°C (-22° to 159.8°F) |
| Altitude | ≤10,000 ft. |

Test Set Certifications

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|------------------------|
| MIL-PRF-28800F Class 2 |
| MIL-STD-810F |
| UL,CE |

For a complete certification list, see GPSG-1000 Data Sheet



Standard Accessory Kit