

GPS Antenna Converter



The GPS antenna combines a planar antenna and a frequency converter, which translates the high-frequency phase-modulated spread spectrum signal of the GPS system to an intermediate frequency. This way a standard cable (e.g. AWG22) can be used for the connection with the GPS clock and a distance of up to 120 meters between receiver and antenna is possible without additional amplifier.

Key Features

- 12-channel simultaneous operation
- Ultra-low power consumption: less than 1W
- Holder for Wall Mounting (included)

Interface Characteristics

- **Cable:**
 - 1 Pair 22 AWG Shielded Cable
- **Power consumption:** less than 1 W
- **Passive current loop system**
- **DCF 77 transmission format**
- **Acquisition:** less than 4 minutes

Performance Specifications (GPS system)

- **General:**
 - L1 (1575.42 MHz) frequency
 - C / A code
 - 12-channel continuous tracking receiver
- **Update rate:** 1 Hz
- **Accuracy:**
 - Horizontal: < 2.5 m (50%), < 5 m (90 %)
 - Altitude: < 5 m (50%), < 8 m (90 %)
 - Velocity: 0.06 m / s
 - PPS (static): ± 25 ns (50 %)
- **Acquisition time:**
 - Re-acquisition: 2 s (50 %)
 - Hot Start: 2 s (50%)
 - Warm Start: 35 s (50%)
 - Cold Start: 38 s (50%)
- **Operational limits:**
 - Altitude: 18000 m
 - Velocity: 515 m / s
 - Acceleration: 2 g
- **Sensitivity:**
 - Tracking: - 160 dBm
 - Acquisition: - 146 dBm

Environmental Specifications

- **Operating Temperature:** - 40 °C to + 85 °C
- **Storage Temperature:** - 55 °C to + 105 °C
- **Vibration :**
 - 0.008 g² / Hz from 5 Hz to 20 Hz
 - 0.05 g² / Hz from 20 Hz to 100 Hz
 - - 3 dB / octave from 100 Hz to 900 Hz
- **IP code:** 65

NB : the unit is remotely powered by the connected GPS receiver (via the antenna cable) and can be used only with GPS equipment from GORGY TIME.

Please specify your order, if you need a different cable length.

VERSION	ITEM CODE
GPS antenna converter unit with a 25m cable	3G25-V4
GPS antenna converter unit with a 50m cable	3G50-V4
GPS antenna converter unit with a 100m cable	3G100-V4