



Hiper-GGD (Making GPS+ positioning easier than ever)

Like each member of the HiPer family, the Hiper-GGD features a compact, lightweight design but adds the ability to track dual-frequency GPS and Glonass satellites! The HiPer-GGD is the first system of its size with the advanced performance of dual constellation tracking.

Hiper-GGD features:

- GPS + GLONASS Satellites
- Compact, lightweight design
- Dual frequency RTK GPS+ (dual constellation) tracking
- Fully integrated receiver/antenna
- Internal UHF radio
- Up to 96Mb of memory

Everything you need to is fully integrated:

At Topcon, we developed GPS+ by taking the existing GPS system and improving it by adding more usable satellites (Glonass). Anyone who knows GPS knows that the more satellites you can track, the better your system can perform. Don't struggle with the hassle and frustration of not having enough satellites and having to wait for more.

For the most advanced GPS+ system in the world, and the highest levels of performance available in one simple, integrated system, don't get frustrated with old technology, **get Hiper-GGD!**



Specifications

Specifications are subject to change without notice. Performance specifications assume a minimum of 6 GPS or 7 GPS/GLONASS satellites above 15 degrees in elevation and adherence to procedures recommended by TPS in the appropriate manuals. In areas of high multipath, during periods of high PDOP and during periods of high Ionospheric activity performance may be degraded. Robust checking procedures are highly recommended in areas of extreme multipath or under dense foliage.

**Cinderella feature activates full receiver reception at GPS midnight every other Tuesday for 24 hours.*

<Specifications>

Description	40 channel integrated GPS+ receiver/antenna with MINTER interface.
Tracking Specifications	standard: 40 L1 GPS (20 GPS L1+L2 on Cinderella 2 days) optional: 20 GPS L1+L2 (GD), GPS L1 + GLONASS (GG), GPS L1+L2+GLONASS (GGD)
Tracking channels	
Signals Tracked	L1/L2 C/A and P Code & Carrier and GLONASS
Performance Specifications	
Static, Rapid Static	Horizontal: 3mm+ 0.5ppm (x baseline length)
RTK	Vertical: 5mm+ 0.5ppm (x baseline length) Horizontal: 10mm+ 1.0ppm Vertical: 15mm+ 1.0ppm
Power Specifications	
Battery	Internal Lithium-Ion batteries plus 1 external power port
Operating Time	14+ hours
External power input	6 to 28 volts DC
Power consumption	Less than 4.2 watts
Environmental Specifications	
Enclosure	Aluminum extrusion, waterproof
Operating Temperature	-30°C to 60°C / -22°F to 140° F
Dimensions	W:159 x H:172 x D:88 mm / 6.25 x 6.75 x 3.5 in
Weight	1.65 kg / 3.64 lbs
GPS+ Antenna Specifications	
GPS / GLONASS Antenna	Integrated
Antenna Type	Microstrip
Ground Plane	Antenna on a flat ground plane
Radio Specifications	Integrated UHF or GSM
Type of Radio	
Integrated UHF Radio Modem	Internal Rx
Integrated GSM Modem	900/1800MHz Dual Band
I/O	
Communication Ports	2 x serial (RS232)
Other I/O Signals	1pps, Event Marker (Optional)
Status Indicator	4x3-color LED's, two-function keys (MINTER)
Control & Display Unit	External: Topcon FC- 2 000, FC-100, FC-1000, Ranger, IPAQ, or 3rd Party
Memory & Recording	
Internal Memory	Up to 96 Mbytes
Raw Data Recording	1Hz (Up to 20 times per second (20Hz) by option)
Data Type	Code and Carrier from L1 and L2, GPS and GLONASS
Data Output	
Real time data outputs	RTCM SC104 version 2.1, 2.2, 2.3, CMR, CMR+
ASCII Output	NMEA 0183 version 2.2
Other Outputs	TPS format
Output Rate	Up to 20 times per second (20Hz)

Standard Configuration	Optional Features	Common Accessories
<ul style="list-style-type: none"> • Hiper GGD Receiver (0Mb) • 1 Hz Update Rate • Co-op Tracking • NMEA 0183 output • User Defined Outputs • MINTER Interface • 2x RS232 Serial Ports • 1x External Power Port • Power and Data Cables • 1 x External Antenna Connector 	<ul style="list-style-type: none"> • GD, GG, GGD • GSM module • UHF module • Update rate 5, 10, 20Hz • RTK @ 5Hz, 10Hz & 20Hz • Data Recording 4 to 96Mb • CMR/RTCM input/output • Advanced Multipath Reduction • WASS • RAIM • Event Marker • Two additional serial ports 	<ul style="list-style-type: none"> • Data Collector • LitePole • Tripod • Tribrach & adapter • Pinnacle software • Carrying case