

## **GPS + GLONASS + GALILEO RECEIVER**



**Introducing the most advanced GPS+ receiver system ever made**

- G3 Satellite tracking
- 72 Universal tracking channels
- Advanced rugged system design
- Bluetooth wireless technology
- Internal GSM/GPRS cellular communication
- Internal radio communication

**It's time.**

**T**opcon is proud to be the world leader in advanced satellite positioning technology. From our leadership with dual constellation, GPS+GLONASS receivers, emerges the next generation of satellite positioning technology – G3.

G3 is the first technology to combine all three satellite positioning systems – GPS, GLONASS, and the European GALILEO system. In addition to adding the GALILEO system to Topcon's industry leading GPS+GLONASS technology, the new G3 chip technology incorporates all the planned signal modernization of the GPS and GLONASS satellite systems, representing a system that is designed to track all available positioning satellite signals, available now or planned for the future!

The new G3 technology from Topcon ensures our users that a system they invest in today will still be fully operational far into the foreseeable future, eliminating the need to buy a new receiver as the new signals come on line.

Just imagine combining all the power of the new G3 tracking technology in a small, rugged field receiver. The new Topcon GR-3 receiver represents the next generation of advanced system design and tracking technology from Topcon, and truly sets new standards of performance, accuracy and innovative receiver design.

Offering advanced design features not found in other receivers, the GR-3's modern design provides the flexibility and ease-of-use you demand. Bluetooth technology provides GR-3 users with the advantages of a completely cable-free system setup, with any Windows Mobile CE® field controller, and the ultra-rugged construction of the GR-3 is designed to take the punishment of any jobsite.

Topcon's GR-3 with its Universal Signal Tracking and a wide array of advanced design features is truly a revolutionary receiver, far ahead of any other receiver technology available!

Welcome to the next generation of satellite positioning technology!

## The new Topcon GR-3 represents the next generation in GPS+ receiver technology.



### G3 Tracking Technology

- 72 "Universal" channels support all current and planned satellite positioning signals
- All GPS Signals
- All Glonass Signals
- All Galileo Signals



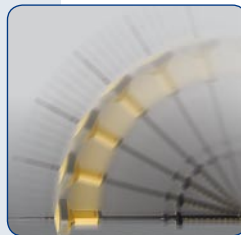
### Advanced System Design

- Hot-Swappable Batteries
- Li-ION Rechargeable or Alkaline
- Completely Cable-Free Design
- Convenient Quick-Snap pole mounting system



### Memory & Communication

- Easy Access SD & SIM Cards
- Integrated Tx/Rx UHF radio
- Internal GSM/GPRS
- Bluetooth Wireless Technology



### Ultra Rugged Construction

- Durable magnesium housing
- I-Beam construction for added strength
- Weatherproof design IP66
- Withstands 2(m) pole drop onto concrete
- Environmentally sealed external ports

## Combine the GR-3 with a Topcon Controller!

- Topcon's FC Series Field Controllers
- Full color touch screen
- Graphical Windows interface
- Operates the full suite of Topcon field controller software packages
- Wireless operation via Bluetooth connection



## The GR-3 is the next generation RTK GPS system from Topcon.

This exciting new system incorporates G3 tracking technology to track all three satellite positioning systems as well as new design features not found in any other system.



**1** Precision Tuned Micro-Centered Antenna

**2** 72 channel Paradigm G3® Chip Technology

**3** Easy Access SD Memory Card & GSM SIM Card

**4** Environmentally sealed external ports

**5** Rechargeable Li-ION & Alkaline Battery packs standard

**6** Quick-Connect Pole Adapter

**7** Center Mount Communication Antenna

**8** Advanced, Durable, Lightweight Design

**9** Advanced super bright display with backlit LED lights

**10** Bluetooth Technology

**11** Rugged I-Beam Construction

**12** Hot-Swappable Battery

**13** Standard 5/8 X 11 Threaded mount

### Cable-Free Base & Rover Operation

- No hassles from broken cables
- Quick, easy setup & teardown
- Simple to learn & use
- All fits in one small hard sided case



### Dual Receiver Package Includes:

- Two GR-3 Receivers
- Charging Cradles
- PC Data Cables
- Hard Carry Case
- Radio Antennas
- Manuals & Utility software



**It's time.**

### The Leader in Positioning Technology ...

Your authorized Topcon dealer has the answer for all of your precise positioning needs. Whether you're looking for precision GPS+ control for surveying and engineering applications or setout and grade management on a construction job site, your local Topcon dealer offers the widest range of products to get the job done quickly and accurately.

And don't forget, Topcon also offers the industry's easiest-to-use GPS+ machine control systems. Capable of working as an indicate-only system or fully automatic grade control, Topcon offers systems to automate your motorgrader, paver, profiler, dozer, excavator, or ag/land leveling machines.



There's only one company that offers you all of the positioning tools to keep you competitive in today's market.

### The Leader in Customer Satisfaction ...

To ensure that your Topcon system maintains peak performance, your local Topcon partner offers factory trained and certified service technicians.

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## SPECIFICATIONS

### GR-3

#### TRACKING

Number of Channels	72 Universal Channels
Signals Tracked:	
GPS	L1, L1 CA, L1 P, L2, L2 C, L2 P, L5
GLONASS	L1, L1 CA, L1 P, L2, L2 CA, L2 P
GALILEO	all signals
WAAS/EGNOS	Yes
Antenna Type	Integrated Micro-Center on Flat Ground Plane

#### ACCURACY

Real time RTK accuracy	H: $\pm 10$ mm + 1 ppm V: $\pm 15$ mm + 1 ppm
Post processed Static	H: $\pm 3$ mm + 0.5 ppm V: $\pm 5$ mm + 0.5 ppm

#### COMMUNICATIONS

Optional Radio Type	Integrated Tx/Rx UHF radio
Base Radio Output	0.25 - 1.0 Watt, selectable
Cellular Communications	Integrated via SIM Card, GSM/GPRS
Wireless Communications	Integrated Bluetooth version 1.2 comp

#### DATA & MEMORY

Memory	Internal, Removable SD Memory Card (up to 2 GB)
Data Update/Output Rate	1 - 20Hz Selectable
Real Time Data Output	TPS, RTCM SC104, CMR, CMR+
ASCII Output	NMEA 0183 version 3.0
Control & Display Unit	Optional, External, Mobile field computer

#### ENVIRONMENTAL

Enclosure	Aluminum I-Beam Housing
Operating Temperature	-40°C to 50°C *
Environmental Specification	IP66 waterproof/dustproof
Shock Rating	2 meter pole drop
Humidity	100% non condensing
Operating time	Base 11 hrs / Rover 13 hrs

\*Receiver will operate normally to -40°, internal batteries are rated to -20°

 **TOPCON**  
www.topcon.eu

Your local authorized Topcon distributor is: