

**GR-3**

**TOPCON**



## **G3 ENABLED GNSS RECEIVER**



### **Advanced GPS+ Technology**

- G3 SATELLITE TRACKING (GPS, GLONASS, GALILEO)
- ADVANCED RUGGED SYSTEM DESIGN
- BLUETOOTH WIRELESS TECHNOLOGY
- 72 UNIVERSAL TRACKING CHANNELS
- OPTIONAL INTERNAL GSM/GPRS CELLULAR COMMUNICATION

# It's time.

Topcon is proud to be the world leader in advanced satellite positioning technology. From our leadership with dual constellation, GNSS receivers, springs 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. Only Topcon offers the Universal Tracking Technology found in the new G3 receiver system, demonstrating clear technology leadership.

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.

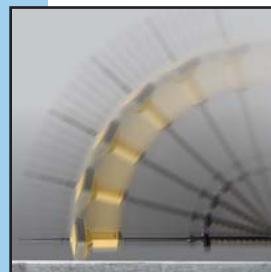
Offering advanced design features not found in other receivers, the GR-3's modern design provides the flexibility and ease-of-use you demand. Bluetooth technology provides GR-3 users with the advantages of a completely cable-free system setup, with any Windows CE field controller, and the ultra-rugged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



### 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



### 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
- 915 MHz Spread Spectrum Radio
- Optional Internal GS/GPRS
- Bluetooth Wireless Technology

### Ultra Rugged Construction

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

## 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.



### 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
- Fixed Height Tripod



### Accessories



#### GMS-2 Dual-use Controller

Combine surveying and GIS location tasks with the optional GMS-2 controller. Navigate using the integrated GPS, then operate as an RTK controller connected to the GR-3.



#### Optional Smart Charger

(Standard in Base or Base/Rover packages)

#### Functions:

- Charge Batteries
- External Power Supply
- Integrated Tripod Hook

#### Topcon Tools Office Software Suite

Post processing raw GPS data, verification of RTIC measurements or combining satellite data with terrestrial measurements, Topcon's Topcon Tool Software Suite provides unsurpassed power and flexibility.

#### Field Controller Software

**TopSURV**  
Topcon's professional survey Field Control Software.

#### Pocket 3-D

Topcon's Field Software designed specifically for the contractor.



## 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 layout 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. They're only available from your local dealer, and they're only from Topcon.

## The Leader in Customer Satisfaction...

To ensure that your Topcon system maintains peak performance, your local Topcon dealer offers factory trained and certified service technicians. And just in case service assistance isn't available in your area, our factory offers a repair and support policy second to none.

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Specifications subject to change without notice

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## Basic Specifications

### TRACKING

Number of Channels	72 Universal Channels
Signals Tracked:	
GPS	L1, L2, & L5 carrier, CA, L1 P, L2 P, L2C
GLONASS	L1, L2, & L5 carrier, L1CA, L2CA, L1 P, L2 P
GALILEO	E2-L1-E1, E5, E6
WAAS/EGNOS	Yes
Antenna Type	Integrated Micro-Center on Flat Ground Plane

### ACCURACY

Real time RTK accuracy	H: 10mm+1ppm V: 15mm+1ppm
Post processed Static DGPS	H: +3.0mm+0.5ppm V: +5.0mm+0.5ppm

### COMMUNICATIONS

Optional Radio Type	Integrated Tx/Rx 915MHz Spread Spectrum
Base Radio Output	0.250 – 1.0 Watts, selectable
Cellular Communications	Integrated via SIM Card, GSM/GPRS
Wireless Communications	Integrated Bluetooth version 1.1 comp

### DATA & MEMORY

Memory	Internal, Removable SD Memory Card
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 Computer

### ENVIRONMENTAL

Enclosure	Magnesium I-Beam Housing
Operating Temperature	-20 to +50C with batteries
Environmental Specification	IP66 waterproof/dustproof
Shock Rating	2 meter pole drop



## The Leader in Positioning Technology...

Topcon Positioning Systems is the worldwide leading developer and manufacturer of precision positioning equipment and offers the widest selection of innovative precision GPS systems, laser, optical surveying, and machine control products.



From open-field construction projects to isolated surveying sites and from rolling farmland to inner city utility projects, Topcon Positioning Systems provides innovative technology that provides a decidedly competitive edge to end-users.



The recognized innovative trend-setter in its industry, Topcon has focused on developing an array of integrated positioning and automation technologies to meet the constantly changing demands facing construction, surveying, agriculture, utilities and law enforcement industries worldwide.

Your local Authorized Topcon dealer is: