Software

MAGNET software is tailored for use with Sokkia GPS/GNSS receivers in both field and office works.

MAGNET Enterprise

A managers dream of tracking all field and office data in one simple to access web interface. Store and exchange your field data in the Enterprise cloud. Save the drive time by sending your field and office updates to the cloud rather than driving back to the office.
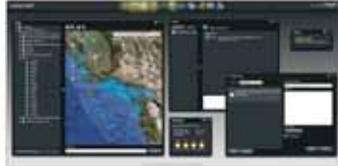
MAGNET Office

Full CAD functionality with MAGNET Office Site and Topo. Or field data processing with MAGNET Office Tools inside AutoCAD® products, like Civil3D®. The MAGNET Office solution has what you need. Pick the module that fits your needs.
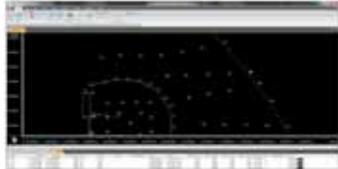
GRX2 Specifications

Tracking capability		
Number of channels[1]		226 channels
Tracked signals[1]	GPS	L1 CA, L1/L2 P-code, L2C
	GLONASS	L1/L2 CA, L1/L2 P-code
	SBAS	WAAS, EGNOS, MSAS, QZSS
Positioning accuracy[2]		
Static	L1+L2	H: 3mm + 0.5ppm V: 5mm + 0.5ppm
	L1 only	H: 3mm + 0.8ppm V: 4mm + 1ppm
Fast static	L1+L2	H: 3mm + 0.5ppm V: 5mm + 0.5ppm
Kinematic	L1+L2	H: 10mm + 1ppm V: 15mm + 1ppm
RTK	L1+L2	H: 10mm + 1ppm V: 15mm + 1ppm
DGPS		<0.5m
User interface		
Operation		Single-button operation for power, receiver reset, memory initialization
Display panel		22 LED status indicators
Voice navigation		Multi-lingual voice messages for receiver status information
Data management		
Memory		SD/SDHC card (FAT16/32 formats)
Update/output rate[3]		1Hz, 5Hz, 10Hz, 20Hz (10Hz RTK Standard)
Communication port		RS-232C (4,800 to 115,200bps)
Wireless communication		
Bluetooth modem		V2.1 + EDR, Class 2, 115,200bps[4]
Digital UHF II modem[4]		Internal, receiver (RX) and transmitter (TX), 410 to 470MHz
GSM/HSPA modem[4]		Internal
Environmental		
Dust and water protection		IP67 (IEC 60529:2001) at closing all connector caps. Protected against temporary immersion up to 1m (3.3ft.) depth.
Shock		2m (6.56ft.) pole drop
Operating temperature	GRX2 receiver	-40 to +65°C (-40 to +149°F)
	BDC70 battery	-20 to +65°C (-4 to +149°F)
	UHF/GSM modems	-20 to +55°C (-4 to +131°F)
Storage temperature		-45 to +70°C (-49 to +158°F)
Humidity		100%, condensing
Physical		
Enclosure		Magnesium alloy housing
Size		Dia. 184 x H 95mm (dia. 7.24 x H 3.74 in.)
Weight	GRX2 receiver	1.0kg (2.20 lb.)
	BDC70 battery	195g (6.9 oz.)
Power supply		
Standard battery BDC70		Detachable, Li-ion battery, 7.2V, 5240 mAh
Operating time at 20°C (68°F)		>7.5 hours in static mode w/Bluetooth connection
Charger CDC68	Recharging time	Approx. 4 hours at 25°C (77°F)
	Input voltage	100 to 240V AC (50/60Hz)[5]
External power	Input voltage	6.7 to 18V DC

[1] Number of channels and tracked signals vary according to receiver configurations.
[2] Accuracy depends on the number of satellites used, obstructions, satellite geometry (DOP), occupation time, multipath effects, atmospheric conditions, baseline length, survey procedures and data quality.
[3] 1Hz standard. Higher rates available as options.
[4] Internal "UHF modem" or "UHF-Cellular modem" available as factory options.
Bluetooth Class 1 when connected to a Class 1 data collector.
[5] Use with an appropriate AC power cable.

www.sokkia.co.jp
75-1, HASUNUMA-CHO, ITABASHI-KU, TOKYO, 174-8580 JAPAN

TOPCON SOKKIA INDIA PVT. LTD.
C-25, GROUND FLOOR, SECTOR-8,
NOIDA, U.P. - 201 301
www.topconsokkia.ind.in

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SOKKIA

GRX2

226 CHANNEL GNSS RECEIVER
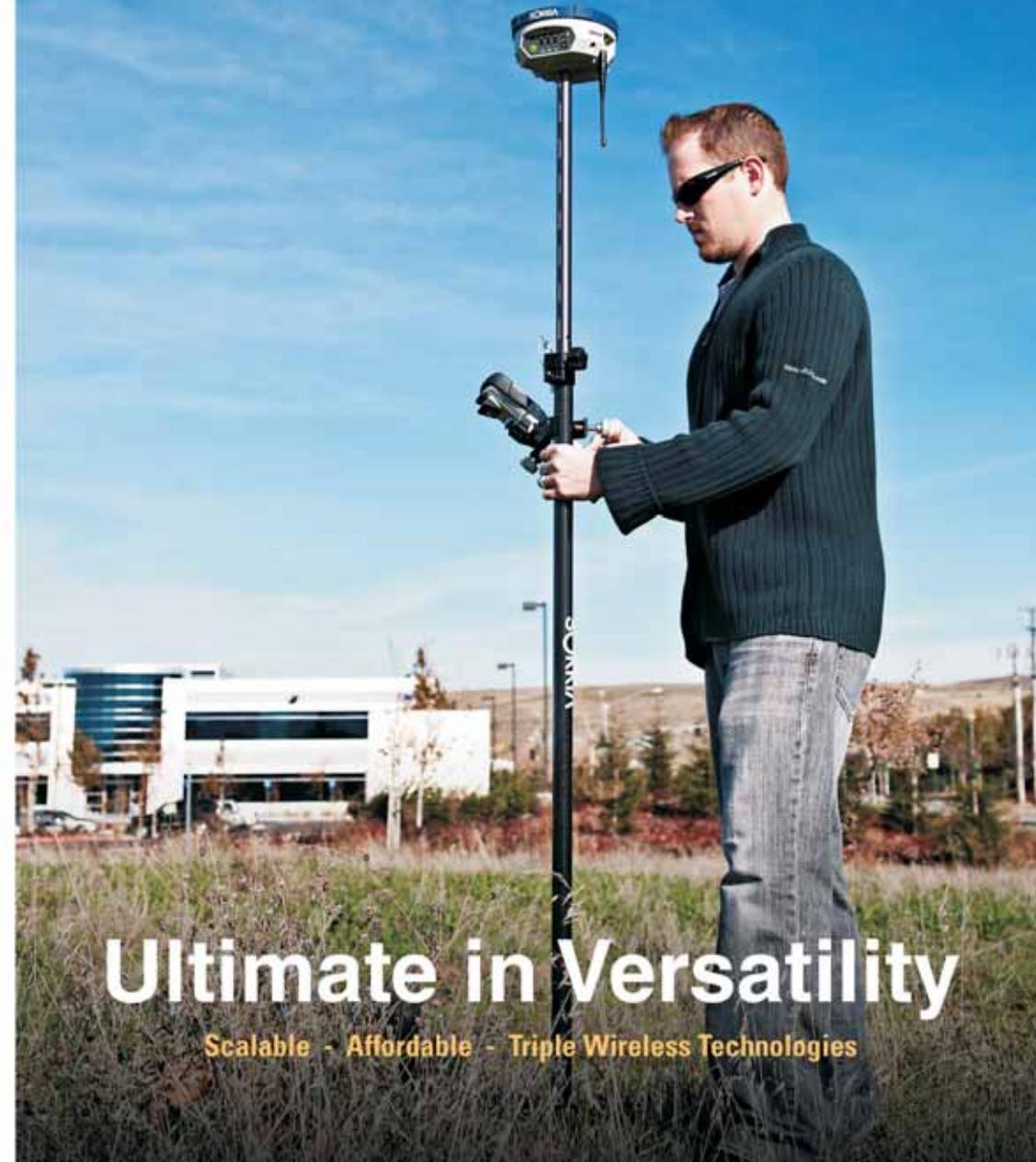
Ultimate in Versatility

Scalable - Affordable - Triple Wireless Technologies

Sokkia GRX2 has been enhanced with the latest GNSS chipset technology, providing 226 channels and superior antenna quality. Both RTK and Static operations will be completed with increased productivity. The GRX2 provides unmatched usability and versatility that guarantees to increase productivity.

GRX2 GNSS Receiver

The GRX2 receiver is a fully integrated dual constellation receiver, antenna, radio, and optional cellular modem. In addition, the integrated Bluetooth module, now enhanced for better performance, is designed into a rugged magnesium alloy body.

Fully Scalable Architecture

GRX2's scalable architecture maximizes your return on investment. It allows you to start with an L1 GPS receiver with a minimal initial cost, which can be upgraded to L1 GPS+GLONASS, to L1/L2 GPS, up to 226-channel L1/L2 GPS+GLONASS receiver at any time you need.

226 Channels for GPS + GLONASS + SBAS

- 226 tracking channels with Universal Tracking Technology are available for GPS, GLONASS and SBAS signals tracking.
- Supports GPS L2C signals.

Triple Wireless Technologies Inside

Three commonly-used wireless technologies can be integrated into the GRX2 receiver.
1) Digital UHF Modem (receiver/transmitter): for RTK base and rover
2) GSM/HSPA Modem: for network RTK, and MAGNET Relay
3) Bluetooth Modem: for controller and other PC
Internal "UHF modem" and "UHF+GSM/HSPA modem" are available as factory options.

Maximum Versatility in RTK Applications

Utilizing full wireless connectivity and the Sokkia-invented voice navigation system, the GRX2 dramatically facilitates the use of both RTK and network RTK technologies.

- Built-in GSM/HSPA modem makes the GRX2 an ideal rover receiver for network RTK positioning.
- The GRX2 can be used for both private RTK base and RTK rover using an internal digital UHF modem without any extra device.
- The GRX2 is MAGNET Relay Ready - Cellular to Cellular base/rover RTK.
- Voice messages notify the users when RTK is fixed or lost, or other problems occur. This feature dramatically increases work efficiency by eliminating a need for repeated checks with the controller display.

Other Hardware Features

- 22 status LED displays are exceptionally viewable even under bright sunlight.
- Data storage in popular SD cards. Large capacity SDHC cards are also supported.
- IP67 dust/water protection
- One detachable battery powers the receiver for up to 6 hours in RTK usage with UHF radio communication. The BDC70 Li-ion battery can be used for Sokkia total stations and digital levels.

Data Collectors

The GRX2 has built-in internal bluetooth that allows the user to choose their data collector model and software. This open architecture allows more choice for the user to use the style data collector that they prefer. Whether it is a small palm-sized screen only device, or a larger screen handheld, or even a field visible laptop, the GRX2 is ready to connect.

MAGNET Field

MAGNET Field provides a bright, graphical user interface with large touch icons and bright readable text. Select your color scheme Black, Gold, Blue, Silver, for your best visibility.

- **Fully Scalable**
- **226-channel GPS+GLONASS+SBAS**
- **Integrated UHF+Cellular+Bluetooth®**
- **Voice Navigation**
- **Compact, Watertight and Rugged**