

# GNSS 70 features

- Receiver with camera, IMU, 1.408 Channels and full constellation
- P9IV Controller
- TopoGEOS Survey Field



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## G70 Technical Features

### RECEIVER

Satellite signals tracked	GPS: L1C/A/L2P (Y)/L2C/L5 GLONASS: L1/L2 BEIDOU: B1I/ B2I/ B3I/ B1C/ B2a/ B2b GALILEO: E1/ E5a/ E5b/ E6 QZSS: L1/ L2/ L5/ L6
PPP	Optional
Channels	1408
Position Rate	Up to 20Hz
Signal Reacquisition	< 1 s
RTK Signal Initialization	< 5 s
Hot Start	Typically < 15 s
Initialization Reliability	> 99.9 %
Internal Memory	8 GB
Tilt Sensor	IMU

### POSITIONING

HIGH PRECISION STATIC SURVEYING	
Horizontal	2.5 mm + 0.5 ppm RMS
Vertical	5.0 mm + 0.5 ppm RMS
REAL TIME KINEMATIC (< 30 Km) - NETWORK RTK	
Fixed RTK Horizontal	8 mm + 1 ppm RMS
Fixed RTK Vertical	15 mm + 1 ppm RMS

### INTEGRATED GNSS ANTENNA

High accuracy multi-constellation micro-strip antenna, zero phase center, with internal multipath suppressive board

### INTERNAL RADIO

Type	TRM101 HDSC
Frequency Range	410 - 470 MHz
Channel Spacing	12.5 KHz / 25 KHz
Power	1 W
Maximum Range	4 km in urban environment Up to 12 Km with optimal conditions

### INTERNAL MODEM

Band	LTE-FDD: B1/B2/B3/B4/B5/B7/B8/B12/ B13/B18/B19/B20/B25/B26/B28 LTE-TDD: B38/B39/B40/B41 UMTS: B1/B2/B4/B5/B6/B8/B19 GSM/EDGE: B2/B3/B5/B8 Nano SIM card
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### INTERNAL CAMERA FOR STAKE OUT

Rasolution	2 MP
Image frame	30 frame/s
Field of view	72°

### COMMUNICATION

I/O Connectors	Type-C for charging and data transfer TNC for connecting to radio antenna
Bluetooth	2.1+EDR, V5.0
Wi-Fi	802.11 a/ac/b/g/n
Web UI	To upgrade the software, manage the status and settings, data download, etc. via smartphone, tablet or other electronic device with Wi-Fi capability
Reference outputs	RTCM 3.x
Navigation outputs	NMEA 0183

### POWER SUPPLY

Battery	Built-in battery, 3.6 V, 12000mAh, support PD fast charge
Power	Type-c PD 12V
Working Time	10 hours
Charge Time	Typically 4 hours

### PHYSICAL SPECIFICATION

Dimensions	Φ 132 mm x 57 mm
Weight	650 g
Operating Temperature	-30°C to 65°C
Storage Temperature	-40°C to 80°C
Humidity	0%-100% none condensing
Waterproof/Dustproof	IP67
Shock Resistance	Withstands a 2-meter pole toppling onto a hardwood floor at normal temperature, and a 1.2-meter free fall

Specifications are subject to change without notice.

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Sede Legale: Corso di porta Romana n.63, 20122 Milan, Italy  
Sede Operativa: Via De Amicis 67, 20092 Cinisello Balsamo (Milan), Italy  
C.F. e P.IVA 13744690960  
[www.topogeos.com](http://www.topogeos.com) | [info@topogeos.com](mailto:info@topogeos.com)