

iG8a RTK GNSS

small, lightweight, rugged, reliable



GPS + GLONASS + Galileo + BeiDou + SBAS ·
Any-Mix-Fix
tracking fully enabled ·
200+ channels · 50Hz
tracks and utilizes Galileo BeiDou L2C L5 today



Bright sunlight readable OLED panel
keyboard for quick mode selections



Dual Batteries ·
11-hour Operation · hot swappable



Electronic bubble verified shots



Well connected:
Wi-Fi · http · ftp
Bluetooth · USB · Serial ·
403-473 MHz TxRx Satel UHF




27 GB high speed static observation memory
iGage direct download and OPUS submittal
8-streams · direct to RINEX logging



IP68 · water and dust proof ·
cast magnesium case ·
2.8 lbs with batteries ·
2-year iGage warranty

iG8a GNSS RTK GNSS Specifications

Price (MSRP) ⁵	Please call iGage +1-801-412-0011 or check the web: www.iG8g.com - pricing for current prices	
GNSS Engine	Trimble BD-970: fully enabled tracking: L2C, L5, GLONASS L3, Precise RTK, Everest, 50-Hz	
		
GNSS Measurements	200+ Channels, 6 constellations, All-in-View Tracking Standard, 50-Hz Rate GPS L1C/A, L1C, L2C, L2E, L5 GLONASS L1 C/A, L1P, L2 C/A, L3 CDMA ⁶ Galileo E1, E5A, E5B, E5AltBOC BeiDou B1, B2 QZSS L1 C/A, L1 SAIF, L2C, L5 SBAS L1 C/A, L5; WAAS, EGNOS, MSAS	
RTK Performance ¹	Horz	8 mm + 1 ppm RMS
	Vert	15 mm + 1 ppm RMS
Post-Processing Static Performance ¹	Horz	2.5 mm + 0.5 ppm RMS
	Vert	3.5 mm + 0.5 ppm RMS
SBAS Performance	Horz	0.3 m RMS with WAAS in the United States 0.5 m RMS with QZSS, EGNOS, GAGAN
GNSS Antenna	IGS robotic absolute type-mean-calibration "IGAIG8	NONE"
RTK Initialization ⁴	< 8 seconds, 99.9% reliability	
TTFF (time to first fix) ⁴	Signal Reacquisition	< 2 seconds (leaving full obstruction to clear sky)
	Warm Start	< 30 seconds (ephemeris and last position known)
	Cold Start	< 45 seconds (no ephemeris or known position)
Protocols	RTCM 2.3, RTCM 3.2, CMR, CMR+, sCMRx NMEA 0183: GSV, AVR, RMC, HDT, VGK, VHD, ROT, GGK, GGA, GSA, ZDA, VTG, GST, PJT, PJK, BPQ, GLL, GRS, GBS HCN and RINEX output for GNSS raw data	
Network	Wi-Fi Client, Data Collector Internet: NTRIP and DIP connections	
Communication	Wi-Fi: 802.11 b/g/n; fully configurable via Web Interface SERIAL: One RS232 High Speed Serial port (7-pin LEMO) USB: Standard High Speed USB Mini Connector, iG8a mounts as a high-speed thumb drive Bluetooth®: Integrated multimode Class 2. iOS, Android, Windows Mobile and Windows Desktop compatible UHF: Internal 1-watt Satel Transmit / Receive UHF modem: 403-473 MHz; TrimTalk, EOTT, SATEL 6 TCP/UDP Clients, 4 TCP Server / NTRIP Caster	
Physical	Size: 5.31" diameter x 4.17" high; Weight: 2.37 lbs., 2.85 lbs. with batteries Operating temperature: -40°F to 165°F; Storage temperature: -40°F to 185°F Humidity: 100% condensation; Vibration: Mil-Std-810G Waterproof and dust proof: IP68 water-resistant to 1.5m for 30 minutes without extra caps or covers Cast A291D magnesium alloy, stainless 5/8" 11 TPI pole mount, double-seal gaskets Shock: survives a 3-meter drop to concrete; connectors mechanical + dust cover protected	
LCD Display	OLED 128 x 64 1.5" Sunlight Readable with Next and Enter buttons	
Electrical	Power consumption: 3.2 watts as a rover Lithium-Ion battery capacity: qty 2 x 3,400 mAh 7.4 V standard batteries, 50.3 Wh, hot-swappable Battery Life ² : 9h45m UHF Rover, 11h20m DCI Rover External Power: input accepts 12 to 36 VDC; heavy duty external power cable included with kits including a Base	
Storage	27-GB Internal Flash: over 300-days storage at 1 Hz, 14-years with 5-second epochs ³ Unlimited expansion with external flash drive	
Data Collection Software	GeoMax X-PAD Ultimate (preferred), Carlson SurvCE, SurvPC V5.08 to 6.08, MicroSurvey FieldGenius; LandStar7	
Warranty	2-year iGage warranty; accessories 1-year; batteries 90-days	

¹ Precision and performance values assume a minimum of 9-satellites in multipath clear, EMI free, obstruction free environment with reasonable atmospheric conditions and satellite geometry. Network based solutions based on shortest actual baseline. Post-processed accuracy is dependent on baseline length and time-on-point, 24-hour observations may be required. Stable mounts and generally accepted survey practices are required for the highest order survey results.

² Battery life varies with temperature and battery age. An external power source is recommended for static occupations lasting longer than 8-hours and base operation longer than 4 hours. Elevated and extreme cold working or storage temperatures (> 85°F, <-20°F) hasten capacity loss.

³ Assuming 14-tracked satellites.

⁴ Initialization times assume reasonable baseline, constellation and number of SV's in a multipath and obstruction clear environment.

⁵ Price includes Ground Shipping to most USA address.

⁶ There is no public GLONASS L3 CDMA ICD, receiver is not guaranteed to be fully compliant with this signal.

Prices, specifications and descriptions are subject to change without notice. Please call us for the latest information and a written quotation.

FCC ID SY4-A01010

A FCC license is required for UHF base operation.



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