

S320™ GNSS Survey Receiver

Built Surveyor Tough

key features

- **SMS Communication**
Send and receive status messages via SMS
- **Internal Radio SS/UHF & GSM Cellular**
Optional UHF 400 MHz or 900 MHz internal radio eliminates the need for cables on both base and rover setups
- **Dual Bluetooth Ports**
Connecting data collectors and CDMA modem devices
- **Dual Hot-Swap Batteries**
Includes two lithium ion batteries, which provides more than 10 hours of battery life
- **2GB SD Memory Card**
Removable SD card for data logging with powerful scripting capabilities
- **SureTrack™ Intelligence**
Hemisphere GNSS' exclusive SureTrack intelligence gives you excellent RTK performance: Long-range RTK baselines; reliable RTK in congested environments; removes concerns of mixing GNSS data from various manufacturers; even if base is GPS only, rover can deliver complete GNSS performance where others may not; RTK rover uses every satellite it's tracking, even satellites not tracked at the base.
- **Auto Level Sensor**
LEDs on the front of the S320 will assist with ensuring the unit is level.

The Complete Package

Hemisphere GNSS supplies surveyors with the complete survey solution. Our survey kit comes with:

- 2 x S320 Receivers
- 1 x XF3 Data Collector (with Pole Bracket)
- 1 x Carlson SurvCE Field Survey Software License
(XF3 uses v4.0 or higher)
- 4 x Batteries + 2 x Battery Chargers
- 1 x Durable Carrying Case
- Radio Antennas + Communication and Power Cables



S320™ GNSS Survey Receiver

GPS Receiver

Receiver Type: Multi Frequency GNSS
 Positioning Modes: RTK, L-band DGNSS, SBAS, External RTCM, Autonomous
 Channels: 270
 RTK Formats: CMR, CMR+, RTCM3, ROX
 Update Rate/Recording Interval: Selectable from 1, 2, 4, 5, 10 Hz (20 Hz available)

Performance

	RMS (67%)	2DRMS (95%)
RTK ¹ :	8 mm + 1 ppm	15 mm + 1 ppm
	Horizontal	Vertical
Static Performance ² :	3 mm + 0.5 ppm	5 mm + 0.5 ppm
DGPS Performance ² :	0.3 m	
SBAS (WAAS) ² :	0.3 m	0.6 m
Autonomous, no SA: ²	1.2 m	2.5 m

Satellite Tracking

GPS: L1C/A, L1P, L2P, L2C
 GLONASS: L1C/A, L1P, L2P, L2C/A
 SBAS: MSAS, WAAS, EGNOS, GAGAN

Communication

Bluetooth: Dual Port
 Radio and GSM Options: Integrated
 1 x GSM/GPRS³
 1 x SS 900 MHz or
 UHF Range: 400 MHz
 CDMA capable

User Interface

LED Display: 8 status LEDs
 Buttons: On/Off, function select
 Data Storage: Removable SD/SDHC card, USB flash drive

Ports

1 x Power Input (2-pin circular)
 1 x RS232 (9-pin circular, multi-use)
 1 x RS232 (DSUB 9-pin)
 1 x Radio Antenna Connector

Environmental

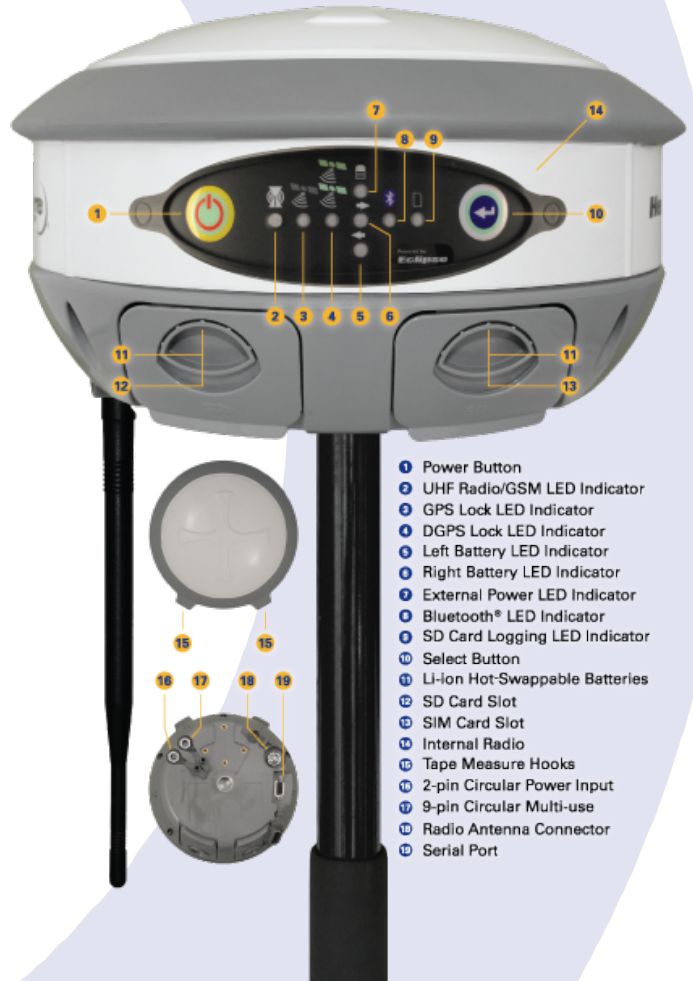
Operating Temperature: -40°C to +70°C (-40°F to +158°F)
 Storage Temperature: -40°C to +85°C (-40°F to +185°F)
 Humidity: Up to 100%
 Enclosure: IP67, EP455, waterproof, dustproof
 Shock: 2 m (6.56') pole drop

Power

Battery: 2 x Li-ion 5.2 Ah total, 7.4V (10-hour hot swappable battery life)
 External Voltage: 9 to 32 VDC

Mechanical

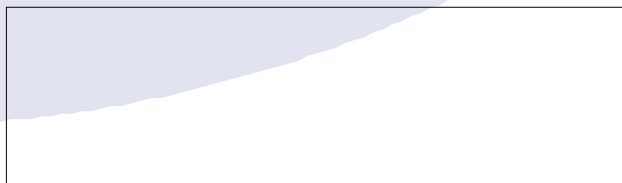
Dimensions: 114 mm H x 197 mm D (4.49" H x 7.76" D)
 Weight: 1.51 kg (3.33 lbs)
 Material: Lexan™ EXL resin



- 1 Power Button
- 2 UHF Radio/GSM LED Indicator
- 3 GPS Lock LED Indicator
- 4 DGPS Lock LED Indicator
- 5 Left Battery LED Indicator
- 6 Right Battery LED Indicator
- 7 External Power LED Indicator
- 8 Bluetooth® LED Indicator
- 9 SD Card Logging LED Indicator
- 10 Select Button
- 11 Li-ion Hot-Swappable Batteries
- 12 SD Card Slot
- 13 SIM Card Slot
- 14 Internal Radio
- 15 Tape Measure Hooks
- 16 2-pin Circular Power Input
- 17 9-pin Circular Multi-use
- 18 Radio Antenna Connector
- 19 Serial Port

- 1 Depends on multipath environment, number of satellites in view, satellite geometry, baseline length (for local services) and ionospheric activity
- 2 Depends on multipath environment, number of satellites in view, satellite geometry, and ionospheric activity
- 3 Please review the AT&T 2G Network Technical Bulletin at <https://hemispheregnss.com/Resources-Support/Technical-Documentation>

Authorized Distributor:



Copyright Hemisphere GNSS, Inc. All rights reserved. Specifications subject to change without notice.
 Hemisphere GNSS, Hemisphere GNSS logo, Athena, Atlas, Atlas logo, Eclipse, Eclipse logo, COAST Vector, H321, and L-Dif are trademarks of Hemisphere GNSS.
 Rev. 03/17



Hemisphere GNSS, Inc.
 8515 E. Anderson Drive
 Scottsdale, AZ, USA 85255

Toll-Free: +1-855-203-1770
 Phone: +1-480-348-6380
 Fax: +1-480-270-5070
 precision@hgnss.com
 www.hgnss.com