

RANGER 3



DATASHEET

Large, bright, sunlight-readable color VGA screen

Meets MIL-STD-810G standards

IP67 rating

SDHC card slot and USB connections

30+ hour rechargeable battery

Windows Mobile 6

Integrated Bluetooth, Wi-Fi, compass and GPS

Ranger 3 Data Collector

The third generation Spectra Geospatial® Ranger™ Data Collector offers a large, bright touch-screen, full alpha-numeric, easy to operate keypad, and is packed with the features surveyors depend on. Built rugged, it meets rigorous MIL-STD-810G military standard for drops, vibration, humidity and extreme temperatures, and with an IP67 rating, it's designed to keep your investment and your data safe. The Ranger 3 comes standard with 8 GB of onboard memory for storing data. Move your data fast and easily using a SDHC card, Bluetooth, USB cable, USB memory stick, Wi-Fi, or WWAN modem.

- Optional 2.4GHz built-in radio provides real-time communications with your Spectra Geospatial FOCUS 35 robotic total station.
- Large 4.2 inch high resolution, field rugged touch screen that is designed for use outdoors in all light and weather conditions.
- Optional WWAN modem for network RTK and data connectivity. Connect to Spectra Geospatial Central for productive data synchronization and coordination.
- Full alphanumeric keyboard with direction keys and multiple Enter keys make for easy use and fast data entry, even when wearing gloves.
- Comes with Spectra Geospatial Survey Pro or Layout Pro field software for survey and construction professionals.

STANDARD SOFTWARE

- Windows Mobile[®] 6.5 Professional operating system, including:
- Microsoft Office Mobile:
 - Word Mobile
 - Excel Mobile
 - PowerPoint Mobile
 - Outlook Mobile
 - Internet Explorer Mobile
 - SMS Text Messaging Support
 - Notes / Tasks
 - Task Manager
 - Adobe Acrobat Reader
 - Calculator
 - Microsoft Pictures and Videos
 - Flashlight mode control application
 - Calendar / Contacts
 - Windows Media Player
 - Messenger
 - SatViewer (GPS interface software application)
 - Customized Camera and Flash control including geo-tagging through Microsoft Pictures & Videos software*
 - Operating system language options (customer provisionable): Simplified Chinese, English, French, German, Japanese, Spanish

Spectra Geospatial Field Software

- Survey Pro
- Layout Pro
- FAST Survey

Standard Accessories (included)

- 28.9 Wh Li-Ion battery
- International AC power supply
- USB cable (mini)
- Stylus with spring tip (pkg of 2)
- Radio antenna for integrated 2.4 GHz radio modem*
- Screen protectors
- Audio port dust cover
- I/O port dust covers
- Standard soft case
- Hand strap
- Stylus tether

HARDWARE

Physical Specifications

- Size
 - 141 mm x 278 mm x 64 mm (5.6 in x 10.9 in x 2.5 in)
 - 80 mm (3.2 in) at handgrip
- Weight
 - 1.04 kg (2.3 lb) including rechargeable battery
 - 1.10 kg (2.4 lb) including rechargeable battery and internal 2.4 GHz radio-modem*
- Housing
 - Polycarbonate (case), Hytrel[®] (overmold)

ENVIRONMENTAL SPECIFICATIONS

Meets or exceeds:

- Operating Temperature: -30 °C to 60 °C (-22 °F to 140 °F)
- Storage Temperature: -40 °C to 70 °C (-40 °F to 158 °F)
- Temperature shock: MIL-STD-810G, Method 503.5, Procedure I
- Humidity: 90% RH temp cycle -20 °C/60 °C (-4 °F/140 °F) MIL-STD-810G, Method 507.5
- Sand & dust IP6x: 8 hours of operation with blowing talcum powder (IEC-529)
- Water: IPx7: Immersed in 1 m of water for 30 minutes (IEC-529)
- Drop: 26 drops at room temperature from 1.22 m (4 ft) onto plywood over concrete MIL-STD-810G, Method 516.6, Procedure IV
- Vibration: General Minimum Integrity and Loose Cargo test MIL-STD 810G, Method 514.6, Procedures I, II
- Altitude: 4,572 m (15,000 ft) at 23 °C (73 °F) and 12,192m (40,000 ft.) at -30 °C (-22 °F) MIL-STD-810G, Method 500.5, Procedures I, II, III

ELECTRICAL SPECIFICATIONS

- Processor: Texas Instrument Sitara[™] 3715 series ARM[®] Cortex[™]-A8 Processor (800 MHz)
- Memory: 256 MB RAM
- Storage: 8 GB non-volatile NAND Flash onboard
- Expansion: SDHC memory slot, USB host
- Batteries: 11.1 V, 2600 mAh, 28.9 Wh Li-Ion rechargeable pack
Battery life of 30+ hours under normal operating conditions¹. Full charge in 3.0 hours.
- Notification LEDs: 3 x tri-colored notification LEDs
- Display: 107 mm (4.2 in) landscape VGA display, 640 x 480 pixels sunlight-readable color TFT with LED backlight, resistive touchscreen
- Keyboard: "ABCD" style keypad with 10-key number pad, directional buttons, and 4 programmable buttons
- Audio: Integrated speaker and microphone with 3.5 mm stereo headset/microphone port
- I/O: USB Host, USB Client
DC power port, 9-pin serial RS-232
- Wireless: integrated Bluetooth 2.0 +EDR, integrated Wi-Fi 802.11 b/g, integrated quad-band GSM/GPRS/EDGE: 850/900/1800/1900 MHz, 2/6 Mbit/s 3G HSDPA GSM, Dual band CDMA2000 in Bands BCO and BC1 (800/900MHz), WWAN* integrated 2.4 GHz frequency-hopping spread-spectrum radio modem*
- Camera*/GPS/Compass/Accelerometer: 5 MP auto focus camera with dual white light LED flash, LED flashlight function; integrated GPS (WAAS enabled); integrated compass; integrated accelerometer

CERTIFICATIONS

- Class B Part 15 FCC certification, CE Mark approval and C-tick approval. RoHS compliant. Bluetooth type approvals and regulations are country specific.
- MIL-STD-810G, IP67, MIL-STD-461, PTCRB, GCF compliant, Wi-Fi Alliance certified.
- Country type certifications: USA, Canada, EU, New Zealand, Australia.
- Pending certifications: Brazil, China (PRC), India, Japan, Republic of Korea, Russia, Taiwan, Thailand, UAE

RECYCLING INFORMATION

- For product recycling instructions and more information, please go to: spectrageospatial.com

1. Unit is idle with backlight turned on, no radios turned on, moderate temperatures.

*Only available on select models



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Please visit www.spectrageospatial.com for the latest product information and to locate your nearest distributor. Specifications and descriptions are subject to change without notice.