The third generation Spectra Precision® 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 Precision 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 Precision 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 Precision Survey Pro or Layout Pro field software for survey and construction professionals.
**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 503.6, 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 12,192 m (40,000 ft.) at -30 °C (-22 °F)

**Electrical Specifications**

- Processor: Texas Instrument Sitara 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: 28.9 Wh Li-ion rechargeable pack
- Battery life: 30+ hours under normal operating conditions. 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/n integrated quad-band GSM/GPRS/EDGE; 850/900/1800/1900 MHz, 2/6 Mbit/s 3G HSDPA GSM, Dual band CDMA2000 in Bands BC0 and BC1 (800/900 MHz), WWAN* integrated 2.4 GHz frequency-hopping spread-spectrum radio modem*
- Camera: 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.
- Country type certifications: USA, Canada, EU, New Zealand, Australia, India, Japan, Republic of Korea, Russia, Taiwan, Thailand, UAE

**Recycling Information**

For product recycling instructions and more information, please go to: [www.spectraprecision.com/ev.shtml](http://www.spectraprecision.com/ev.shtml)

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1 Unit is idle with backlight turned on, no radios turned on, moderate temperatures. Only available on select models.

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**Contact Information:**

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