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.

Features

- 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

**Technical Specifications**

**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

**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 Precision Field Software
- FAST Survey
- Layout Pro
- Survey Pro

**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)

**Electrical Specifications**
Processor: Texas Instrument Sitara® A8 Processor (800 MHz)
Memory: 256 MB RAM
Storage: 8 GB non-volatile NAND Flash onboard
Expansion: SDHC memory slot, USB host batteries
- Batteries: 11.1 V, 2600 mAh,
  28.9 Wh Li-Ion rechargeable pack
  Battery life of 30+ hours under normal operating conditions. Full charge in 3 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 Mbps 3G HSDPA GSM, Dual band CDMA2000 in Bands B0 and BC1 (800/900MHz), WWAN* integrated 2.4 GHz frequency-hopping spread-spectrum radio modem*

**Environmental Specifications**
- 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)
- 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)

**Specifications**
- Memory: 256 MB RAM
- Storage: 8 GB non-volatile NAND Flash onboard
- Expansion: SDHC memory slot, USB host batteries
- Batteries: 11.1 V, 2600 mAh, 28.9 Wh Li-Ion rechargeable pack
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**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.
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: www.spectraprecision.com/ev.shtml.

**Notes / Tasks**
- SMS Text Messaging
- Mobile: Internet Explorer Mobile
- Mobile: Microsoft Office Mobile
  - Word Mobile
  - Excel Mobile
  - PowerPoint Mobile
  - Outlook Mobile
- Mobile: Adobe Acrobat Reader
- Mobile: Operating system language options (customer provisionable): Simplified Chinese, English, French, German, Japanese, Spanish

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

**Contact Information:**

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