Ranger™ 3XR Data Collector

Rugged and Full Featured

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

Spectra Precision Ranger 3XR Data Collector

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.

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
- 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 Precision 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 conditions[1]. 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 BC0 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: www.spectraprecision.com/ev.shtml.

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