

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

The Spectra Precision Ranger data collector runs Spectra Precision Survey Pro field software.

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 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



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