

# SPECTRA PRECISION®

## RANGER™ DATA COLLECTOR

# SPECSHEET

### STANDARD SOFTWARE

Microsoft Windows Mobile 5.0 software programs including:

- Internet Explorer
- File Explorer
- Word Mobile
- Power Point Mobile
- Excel Mobile
- Outlook Mobile
- Windows Media® Player Mobile
- Microsoft ActiveSync® technology
- Microsoft Transcriber (handwriting recognition)
- Pictures, Picture & Videos, Calendar, Contacts, Tasks and Notes
- Online help

Field Application Software:

- Spectra Precision Survey Pro™

### STANDARD ACCESSORIES

Rechargeable Lithium-Ion battery module

- International AC re-charger (100 V–240 V)
- Standard CF-Cap
- USB data cable
- Hand strap
- Stylus pen
- Stylus pen lanyard
- 2 screen protectors

### CERTIFICATION

Class B Part 15 FCC certification, CE Mark approval and C-tick approval. Bluetooth type approvals and regulations are country specific.

### RECYCLING INFORMATION

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

#### Recycling in Europe:

To recycle Spectra Precision WEEE (Waste Electrical and Electronic Equipment) products that run on electrical power, call +31 497 53 24 30, and ask for the "WEEE Associate". Or, mail a request for recycling instructions to: Spectra Precision, c/o Menlo Worldwide Logistics, Meerheide 45, 5521 DZ Eersel, NL.

1 No backlight, moderate temperature, no high power-consumption CompactFlash cards.  
2 Not available on the NX version



Specifications are subject to change without prior notice.

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### TECHNICAL SPECIFICATIONS

#### Physical

Size	266 mm × 131 mm × 48 mm (10.5 in × 5.2 in × 1.9 in); 76 mm (3.0 in) at handgrip
Weight	0.95 kg (2.1lb) including battery; 1.09 kg (2.4 lb) including battery and optional internal radio
Memory	128 MB SDRAM, 512 MB internal (500X) 64 MB SDRAM, 256 MB internal (300X) 64 MB SDRAM, 128 MB internal (NX) non-volatile storage memory
Expandable Memory <sup>2</sup>	CompactFlash (CF) card Secure Digital (SD) card
Processor	520 MHz Intel® PXA 270 XScale CPU (500X) 312 MHz Intel® PXA 270 XScale CPU (300X, NX)
Wireless	Integrated Bluetooth (500X/300X) Optional Integrated Wireless LAN, WiFi 802.11g
Power	Li-Ion rechargeable pack, 6600 mAh, battery life of 30 hours under normal operating conditions <sup>1</sup> . Fast charge to 80% in 2 hours; full charge in 4.5 hours. Battery charge status LED indicator.

#### Environmental

Temperature	Operating Temperature: -30 °C to +60 °C (-22 °F to +140 °F) Storage Temperature: -40 °C to +70 °C (-40 °F to +158 °F)
Humidity	100% condensing, MIL-STD-810F, Method 507.4
Sand & Dust	IP67, MIL-STD-810F, Method 510.3, Procedures I & II
Water	IP67, sealed against accidental immersion (1 m for 30 min.) MIL-STD-810F, Method 512.4, Procedure I
Drops	MIL-STD-810F, Method 516.5, Procedure IV 1.2 m (48 in) onto concrete, 26 drops at room temperature (all faces, edges, corners, one drop each) 6 face drops at 60 °C; 6 face drops at -30 °C
Vibration	MIL-STD-810F, Method 514.5, Procedure I, Figs. 5 & 17
Altitude	MIL-STD-810F, Method 500.4, Procedures I, II & III, 4,572 m (15,000 ft) at +23 °C (+73 °F)

#### Interface

Display	Color, illuminated TFT, daylight-readable touch screen displayed at 320 × 240 pixels (QVGA), backlight illuminated display.
Keyboard	53 key alphanumeric keypad, 8-position spider key
Audio	Integrated speaker and microphone for audio system events, warnings and notifications.
Operating system	Microsoft Windows Mobile 5.0

#### Input/Output

Ports	RS232 9-pin serial port USB Client USB Host DC Power Port
Expansion	1 × Type I CompactFlash (CF) slot 1 × Type II CompactFlash (CF) slot 1 × Secure Data (SD) memory card slot
Radio-modem (optional)	Internal 2.4 GHz frequency-hopping spread-spectrum radio-modem



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