Ranger™ 7 Data Collector

SPECTRA PRECISION

See More, Do More

Ready For You:

- **7" multi-touch display**
  - Easier to see your data and operate
- **Dual hot-swap batteries**
  - Continuous power
- **Windows 10 Professional operating system**
  - OS for professionals
- **Available with Survey Pro and Layout Pro software**
  - The right software for the job

Spectra Precision Ranger 7 Data Collector

Welcome to the fourth generation Ranger data collector. Its all-new design is based on the experience gained over the last 18 years of demanding field operations. The guiding principles have never changed: productivity, reliability, and quality. A down day is simply not an option.

The Ranger 7 continues the legacy of the Ranger data collector by focusing on what is important.

- Screen Size: It's not just about showing a bigger map; it's about seeing results and making decisions.
- Full Keyboard: It's about getting that data input quickly and error free. The backlit QWERTY keyboard and full numeric keypad are designed for just that.
- Rugged and Reliable: A down day really isn't an option. Few things are more damaging to schedules and profits than equipment that isn't ready. The Ranger 7 is designed tough. It is up to your challenge.
- Enables Productivity: The screen, keyboard, toughness, solid pole bracket, hot-swappable batteries, and industry leading field software like Survey Pro, all combined with high quality Spectra Precision instruments means you get the most out of your money.

Quality results are what you produce. Partner with the Ranger 7 to produce more.

PHYSICAL SPECIFICATIONS

- Size
  - 30 x 20.9 x 7.1 cm (11.8 x 8.2 x 2.8 ")
- Weight
  - 1.42 kg (3.12 lb)
- Housing
  - Glass-fibre reinforced resin with integrated drop bumpers

ENVIRONMENTAL SPECIFICATIONS

Meet or exceed

- Operating temperature
  - –20 °C to 60 °C (–4 °F to 140 °F) MIL-STD-810G 501.5 Procedures II (operation)
- Storage temperature
  - –40 °C to 70 °C (–40 °F to 158 °F) MIL-STD-810G 501.5 Procedures I (storage)
- Humidity
  - 90%RH temp cycle –20 °C/60 °C (–4 °F/140 °F) MIL-STD-810G, Method 507.5, Procedure II
- Sand & dust
  - IP6x: 8 hours of operation with blowing talcum powder (IEC-529)
- Water
  - IPx8: Immersion, up to 1 m (3.2 ft) depth for 2 hours
- Drop
  - 26 drops at room temperature from 1.22 m (4 ft) onto plywood over concrete MIL-STD-810G, Method 516.6, Procedure IV

SECURITY

- TPM (Trusted Platform Module)

CONFIGURATIONS

- EMPOWER module support
  - 2 x module bays
- Languages supported at first boot
  - Chinese (Simplified), English (US), French, German, Italian, Japanese, Korean, Portuguese (Brazilian), Spanish (Castilian region and Mexico)

CERTIFICATIONS

- Among others
  - FCC, NRTL, ICES, IC, NRTL, CE, CB, RCM, CCC
- Countries
  - Certified in countries: USA, Canada, EU, Australia/New Zealand, South Africa, India, Malaysia, Tunisia, UAE, Thailand, Taiwan, Russia
- Environmental
  - EU RoHS, China RoHS, REACH, WEEE

COMPATIBLE SOFTWARE

- Survey Pro and Layout Pro

ELECTRICAL SPECIFICATIONS

- Processor
  - Intel Apollo Lake - N4200, 64-bit quad-core
- Memory
  - 8 GB RAM, LPDDR4
- Storage
  - 64 GB eMMC
- Expansion
  - via microSDXC card up to 2 TB
- Batteries
  - 2 x 3100 mAh (22.53 Wh) min. capacity/3150 mAh (22.90 Wh) nominal capacity; removable, hot swappable, charge LED indicator
- Charging time
  - Full-charge 3.5 hours, fast-charge (80 %) 1 ¾ hours
- Battery life
  - Medium usage approx. 5 hours, can range 4-7 hours (depending on display settings, connectivity, data processing, ambient temperature, etc.)
- Power input
  - 19V/5A charging
- Notification LED
  - Charging and power status
- Display
  - 17,78 cm (7-inch), 1280 x 800 landscape, 16:10, multi-point capacitive, 650+ nits sunlight readable
- Keyboard
  - QWERTY or ABCD, with backlight, numeric key block, Fn keys (6 physical + 6 2nd function Fn keys)
- Audio
  - Speaker and dual digital microphone array with noise reduction
- External speaker/microphone
  - 3.5 mm mini-jack or wireless headset
- I/O
  - User replacable module. Standard: Charger/DC power-in, USB 3.1 Gen 1 type A host, serial RS232 DB-9
- USB
  - USB 3.1 Gen 1
- WWAN
  - Worldwide LTE in regions where it is available, and compatible with 3G networks AT&T and Verizon certified. MicroSIM card
- Wi-Fi
  - 802.11 a/b/g/n, 2.4 GHz radio band

- Bluetooth®
  - BT 2.1 + EDR, BT 4.1
- Camera
  - Rear camera: 8 MP autofocus with flash
  - Front camera: 2 MP fixed-focus
- GNSS
  - Integrated GNSS
- Sensors
  - 3-axis accelerometer, magnetic sensor, ambient light sensor, proximity sensor

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