



# DATA COLLECTOR COMPARISON CHART



	ST100	Ranger 7	Ranger 5	Ranger 3	MM60
<b>Operating System</b>	Microsoft® Windows® 10 Professional	Windows 10	Android™	Windows Embedded Handheld 6.5	Android™ 10
<b>Screen Size</b>	10.1" capacitive multi-touch with EMR	17.8 cm / 7.0"	12.7 cm / 5.0"	10.7 cm / 4.2"	15.2 cm / 6"
<b>Screen Type</b>	LED backlight, scratch-resistant, auto rotate	Color multi-touch	Color multi-touch	Color touch	Color multi-touch
<b>Internal GPS with SBAS</b>	Yes	Yes	Yes	Yes	Yes
<b>Processor</b>	Intel Core™ i5 Processor	Intel Apollo Lake-N4200, 64-bit quad-core(1.1 GHz)	Qualcomm® SDA660 (2.2 GHz)	Texas Instruments Sitara 800 MHz	Qualcomm Snapdragon 626 (2.2 GHz)
<b>Memory (RAM)</b>	16 GB SDRAM	8 GB	4 GB	256 MB	4 GB
<b>Data Storage</b>	512 GB Storage	128 GB	64 GB	8 GB	64 GB
<b>Internet Connection</b>	Bluetooth v 5.1, 4G LTE, Wi-Fi 802.11ac	Bluetooth, Wi-Fi, 3G, 4G LTE data	Bluetooth, Wi-Fi, 3G, 4G LTE data	Bluetooth, Wi-Fi, 3G GSM data	Bluetooth, Wi-Fi, 3G, 4G LTE data and voice
<b>Camera</b>	Rear	Front and Rear	Rear	Rear	Front and Rear
<b>Compatible Software</b>	Origin	Origin	Origin	Survey Pro	Origin
<b>GNSS Accuracy (Horizontal)</b>	4-6m	2-4 m (RMS)	5.2 m average in open, light canopy	2-4 m with SBAS correction	1.5 m
<b>GNSS Satellite Constellations</b>	Beidou, Galileo, GLONASS, GPS L1 C/A, QZSS	L1 GPS, GLONASS, BeiDou, SBAS	GPS L1 C/A, QZSS w/SBAS, BeiDou, Galileo, GLONASS	—	GPS, GLONASS, Galileo, QZSS, BeiDou, SBAS
<b>Environmental</b>	IP65 / MIL STD 810H	IP68 / MIL-STD-810G	IP65 / MIL-STD-810H	IP67 / MIL-STD-810G	IP67 / MIL-STD-810G
<b>Expandability</b>	2x EMPOWER module bay supports EM120 2.4Ghz radio	2x EMPOWER module bay supports EM100 GNSS receiver, EM120 2.4 GHz radio and EM11x barcode/RFID modules	1x EMPOWER module bay supports EM100 GNSS receiver, EM120 2.4 GHz radio and EM11x barcode/RFID modules	Some models have an integrated 2.4 GHz radio or Barcode Imager.	—
<b>Battery</b>	92Wh internal non removable, 10 hours @ 20° C with GPS on	2x Field Replaceable/Rechargeable 3100 mAh, 22.53 Wh (4-7 Hours)	Internal Rechargeable Li-Ion 4530 mAh / 7.2V nominal capacity 16 (RTS) - 18 (GNSS RTK) hours Optional field replaceable battery provides additional 16-18 hours	Field Replaceable/Rechargeable 2600 mAh, 28.9 Wh Li-Ion (34 Hours)	Field Replaceable 8000 mAh (15 hours)
<b>Alpha-Numeric data entry</b>	Directional pad, and multiple function keys	QWERTY with backlight, numeric key block, Fn keys (6 physical + 6 2nd function Fn keys)	QWERTY International English layout with backlight, Numeric, 4 way directional keys, Android keys, 12 programmable Fn keys	QWERTY or ABCD, numeric key block, 4-way directional key with enter and 2 programmable keys	Volume Up/Down, power, home, return, menu, 3 programmable
<b>Size &amp; Weight</b>	279 x 200 x 18.5 mm, 1.65 kg	209 x 302 x 70 mm, 1.42 kg	287.1 x 175.6 x 43.9 mm, 0.934 kg	141 x 278 x 64 mm, 1.1 kg	196 x 93.4 x 17.2 mm, 0.385 kg

For more information including full specification details and sales contacts, please visit [spectrageospatial.com](https://spectrageospatial.com)

Specifications subject to change without notice.