2024 LandMark Spatial Solutions Windows Mobile/Windows Handheld Matrix

	F4 Devices Forge 912	Janam XM5	Handhelds Nautiz X8	F4 Devices Forge 912 ECHO	Trimble Juno T41 XGR	Juniper Systems Archer 2 Geo	Juniper Systems Mesa 4 Geo
			Used units may be available		SOLD OUT	SOLD OUT	
Pros:	Good Numeric Keypad, Good GPS	Resistive Screen, Querty Keyboard with Directional Arrows	Big screen, fast processor, tons of RAM, Numeric Keypad	Good Numeric Keypad, Good GPS, Echo Location for borderline tree measurement	**Most Accurate GPS**, Big Screen, Fast Processor, Gorilla Glass Screen, Most Memory, Very Rugged	Numeric Keypad, Big Screen, Brightest Screen, GPS + Glonass, 20 hr battery, Fast Processor, Very Rugged	Windows 11 Pro, 7" bright screen, GPS + Glonass, Fastest Processor, Most Memory
Cons:	Slower operation, Locks up	1 GB Storage but can add MicroSD card. Recommd cradle for charging.	Screen is sensitive to excess rain or sweat, but Rain Mode helps.	Slower operation, Locks Up	No numeric or directional keys. Little heavier with 1D/2D barcode scanner.	none	none
Price:	~~$1299~~ $1105	$1,399	> $1,399	~~$1699~~ $1275	~~$2699~~ $1799	$2,032	$2,795 +
Processor:	800 MHz	1 GHz ARM Cortex-A8 processor	1.5GHz, dual core	800 MHz	1 GHz, Texas Instruments DM3730	1.0GHz ARM Cortex A8 i.MX53 processor	Intel® N200, 3.7 GHz burst
Internal Memory	8 GB Non-volatile Flash	1 GB Storage but can add MicroSD card	4 GB Non-volatile flash	8 GB Non-volatile Flash	32 GB Non-volatile flash	8 GB Non-volatile flash	128/256 GB Non-volatile flash
RAM	512MB	512	1 GB	512MB	512MB	512MB	8 or 16 GB
Display Size/Type	3.5" Color LCD Transmissive, 480x640 Full VGA , resistive touch	3.5" Color LCD Transmissive, 480x640 Full VGA , resistive touch	4.7" FWVGA capacitive touch display, chemically strengthened glass	3.5" Color LCD Transmissive, 480x640 Full VGA , , resistive touch	4.3" WVGA sunlight-readable Corning® Gorilla® Glass display, capacitive touch	4.3" WVGA LCD TFT (800x480) High visibility backlit LCD, Scratch-resistant , capacitive touch	7" WXGA LCD (1280 x 800) High visibility backlit LCD, Scratch-resistant , capacitive touch
Camera:	5MP Auto focus	5MP Auto focus	8 megapixel camera with autofocus and LED flash	5MP Auto focus	8 MP camera with geo-tagging and dual LED flash	5MP autofocus	13MP rear, 5 MP front, geotagging, autofocus
IP Rating:	IP 67	IP 65	IP 67	IP67 with Plug, 65 without	IP 68	IP 68	IP 68
Standard Warranty:	6 Month	2 Years	1 Year	6 Month	2 years	2 years	2 years
Extended Warranty:			$329 for 3 years - Includes Accidents		$487 for 2 years	$390 for 2 years	$390 for 2 years
Battery	Li-Ion 11.1v, 3800mAH	4000 mAh	Li-Ion 11.1 V, 2500 mAh	Li-Ion 11.1v, 3800mAH	Li-Ion 11.1 V, 2500 mAh	Li-Ion 3.7VDC 10600mAH	Li-Ion 43.2 WHr
AC charge time:	4 hours	4 hours	4 hours	4 hours	4 hours	2 -4 hours	2 -4 hours
Battery life:	9-11 hours	12+ hours	12 hours	9-11 hours	8-10 hours	up to 20 hours	8-10 or 15-16 hours
GPS Receiver Type	UBLOX 52 channel L1, C/A Code	UBLOX with Assisted GPS	UBLOX	UBLOX 52 channel L1, C/A Code	UBLOX L1, C/A Code, with Additional Ground Plane Antenna	NVS Tech NVS08C 32 channel High-sensitivity GPS/GLONASS receiver - L1, C/A code	Quectel LC79H Dual Frequency GNSS receiver and integrated antenna
SBAS:	WAAS, EGNOS, MSAS, GAGAN	WAAS, EGNOS	WAAS, EGNOS	WAAS, EGNOS, MSAS, GAGAN	WAAS, EGNOS	WAAS, EGNOS	WAAS, EGNOS, Beidou, Galileo
Accuracy (Autonomous)	1-3 meters	1-3 meters	1-3 meters	1-3 meters	1-3 meters	2-4 meters	2-5 meters
Accuracy with SBAS (Open Sky):	1-3 meters	1-3 meters	1-3 meters	1-3 meters	1-2 meters	2-4 meters	2-5 meters
GPS Filtering	Yes		Yes	Yes	N/A	Yes	Yes
Echo Location:	No	No	No	Yes	No	No	No
Intergrated Scanner:	No	No	No	No	RFID	No	No
G-Sensor Height Measurement:	No	No	Yes	Yes	No	No	No
Measurements (in):	7.9 in x 3.7 in x1.7 in	6.1 in x 2.9 in x 1.0 in	7.5 in x 3.1 in x 1.3 in	7.9 in x 3.7 in x1.7 in	8.26 in x 3.2 in x 1.26	7.25 in x 3.6 in x 1.5 in	8.48 in x 5.4 in x 1.36 in
Weight (oz):	15.6 oz	10 oz	17.3 oz	15.6 oz	16.7 oz	19 oz	24-32 oz
Ports:	MiniUSB, headphone jack, 9 pin Serial, charging	Micro USB, headphone	Micro USB, USB Host, 9 pin Serial, headphone	MiniUSB, headphone jack, 9 pin Serial, charging	3.75mm audio jack, MCX GPS antenna port, custom port that supports USB 2.0 Host, USB Client	Micro USB, USB Host, 9 pin Serial, headphone	USB 3.0 Host, headphone, 9 pin Serial option, Opt RFID, 1D/2D Barcode
Additional memory	MicroSD Card up to 32GB	MicroSD Card up to 32GB	MicroSD Card	MicroSD Card up to 32GB	MicroSD Card	MicroSD Card	MicroSD Card
802.11	802.11 b/g 54 Mb/s	802.11a/b/g/n	802.11 b/g/n	802.11 b/g 54 Mb/s	802.11 b/g/n	802.11b/g/n with extended range	802.11b/g/n with extended range wifi and BT
Integrated Scannerr	No	1D/2D	No	No	RFID	No	No
Bluetooth:	Class II, v2.1 EDR	Bluetooth v2.1, Class 2 EDR	Class 2.1 with Enhanced Data Rate	Class II, v2.1 EDR	Class 2.1 with Enhanced Data Rate	Class 1.5, v 2.1 EDR	Long-range Bluetooth® v5.3 + EDR, Class 1.5, BLE support
Operating System:	Windows Embedded Handheld 6.5	Windows Embedded Handheld 6.5 or Android	Windows Embedded Handheld 6.5 or Android	Windows Embedded Handheld 6.5	Windows Embedded Handheld 6.5 or Android	Windows Embedded Handheld 6.5.3	Windows 11 Pro
Operating Temp.:	-4 to 140 ºF	-13 to 158 ºF	-22 ºF to 140 ºF	-4 to 140 ºF	-22 ºF to 144 ºF	-22 F to 144 F	-4 F to 122 F