










# 2023 LandMark Spatial Solutions Android Unit Matrix

3/14/2023

									
<b>Pros:</b>		Good GPS, rugged, includes special stylus. Stylus-only mode in MobileMap. Cheapest.	Phablet size. Rugged, great GPS, 15 hour battery, and great price.	Easy to hold with included handstrap. Fast processor, Great GPS.	Numeric Keyboard, 1D scanner or 2D imager	Great screen, processor, and GPS	Numeric keypad, fast processor, optional RTK GPS,	Fastest Processor, most memory and RAM. Most rugged and best warranty	Highest Level of Accuracy! From 1 meter to centimeter depending on subscription
<b>Cons:</b>					Small Screen, Least accurate GPS	Little heavier than others like it		Less Accurate GPS	Older OS, low memory and RAM
<b>Price:</b>		\$515 Wifi or \$615 LTE	\$999	\$1,100	\$1,049	\$1,199	\$1,399	\$2,583	\$5245 for sub-meter
<b>Android Version:</b>		Android 12	Android 11	Android 10	Android 9.0	Android 9.0	Android 12	Android 11	Android 10
<b>Processor/Chipset:</b>		Octa-core 2.7/1.7GHz Samsung Exynos 9810	2.2 Qualcomm Snapdragon 626 MSM8953 Pro, Octa-core	Qualcomm® Snapdragon™ SDM632 -8-core 1.8GHz Kyro 250	MediaTek Helio P22 MT6762, 8 cores 2.0 GHz	2.0 Qualcomm Snapdragon 625 MSM8953 Pro, Octa-core	MediaTek i350, 4 cores 2.0 GHz	Qualcomm Snapdragon Octo-core Kt90	2.2 Qualcomm Snapdragon 626 MSM8953 Pro, Octa-core
<b>Google Mobile Certified:</b>		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
<b>Internal Memory:</b>		128 GB	64 GB	64 GB	64 GB	64 GB	64 GB	64 GB eMMC Flash	64 GB
<b>Additional memory:</b>		MicroSD Card up to 1 TB	MicroSD Card up to 128 GB	MicroSD Card up to 128 GB	MicroSD Card up to 128 GB	MicroSD Card up to 128 GB	MicroSD Card up to 128 GB	MicroSD Card up to 1 TB	MicroSD Card up to 64 GB
<b>RAM:</b>		4GB LPDDR4	4 GB	4 GB	4 GB	4 GB	4 GB	6 GB LPDDR4x	4 GB
<b>Display Size/Type:</b>		8.0" WXGA TFT (1920 x 1200) 16:10 ratio (~283 ppi density)	6" Multi-Touch Sunlight Readable (1920 x 1080)	8" High-visibility HD IPS display (450 Nits) (1280 x 800)	4" capacitive multi-touch, 480x800 pixels, Sunlight readable, Glove/rain mode, Corning® Gorilla® Glass	8" Multi-Touch Sunlight Readable (1920 x 1080)	4.8" capacitive multi-touch, 720x1280 pixels, Sunlight readable, Glove/rain mode	7" WXGA (1280 x 800), High-Vis backlit LCD, Qualcomm® Adreno™ 512 GPU, Chemically-strengthened Dragontrail™ High Ion-Exchange	6" Multi-Touch Sunlight Readable (1280 x 720)
<b>Rear Camera:</b>		13 MP AF + 5.0MP, Flash	13 megapixel camera with autofocus and LED flash	13 MP, Sony sensor	8 MP	13 megapixel camera with autofocus and LED flash	13 megapixel camera with autofocus and LED flash	16 MP with LED flash	13 megapixel camera with autofocus and LED flash
<b>Front Camera:</b>		5 MP	5 MP	5 MP	NA	5 MP	5 MP	2 MP	2 MP
<b>IP Rating:</b>		IP 68	IP 67	IP 67	IP 65	IP 67	IP 67	IP 68	IP 67
<b>Standard Warranty:</b>		1 Year	1 Year	1 Year	1 Year	1 Year	1 Year	2 years	1 Year
<b>Extended Warranty:</b>		Up to 4 years	Up to 5 Years		Up to 5 Years	Up to 5 Years	Up to 5 Years	Up to 5 Years	
<b>Battery</b>		5050 mAh	8000 mAh/30.4 Wh	8000 mAh	3.8V 4400 mAh/16.72Wh	3.8 V/8200 mAh/31.2 Wh	3.6V 6900 mAh (25 Wh)	43.2 Wh	6400 mAh
<b>AC charge time:</b>		Fast Charging	4 hours			4 hours		2-4 hours	4 hours
<b>Battery life:</b>		Up to 11 Hours	15 hours	9-11 hours			12 hours	10-12 hours	8 hours
<b>GPS Receiver Type:</b>		GPS + GLONASS, GALILEO, BDS	UBLOX GNSS Neo -M8T GPS/GLONASS/Galileo/BeiDou	GPS + GLONASS + BeiDou (UBLOX M8030)	MediaTek - GPS/GLONASS/Galileo/BEIDOU	UBLOX GNSS GPS/GLONASS/Galileo/BeiDou	UBLOX NEO-M8U GNSS GPS/GLONASS/Galileo/BeiDou/QZSS, SBAS	Qualcomm SDR660 GNSS receiver and integrated antenna; GPS, GLONASS, Galileo	240 Channels - GPS L1C/A, L1/L2; Glonass; Scalable form meter to sub-meter to sub-foot; RTK compatible
<b>SBAS:</b>		WAAS	WAAS, EGNOS	WAAS, BDS		WAAS, BDS	WAAS	WAAS, EGNOS	WAAS, EGNOS, BeiDou
<b>Accuracy (Autonomous)</b>		1-3 meters	1-3 meters	1-3 meters		1-3 meters	1-3 meters	2-4 meters	< 50 cm
<b>Accuracy with SBAS (Open Sky):</b>		1-3 meters	< 2 meters	< 2 meters		< 2 meters	< 2 meters	2-4 meters	25 cm
<b>Sensors:</b>		Accelerometer, Fingerprint Sensor, Gyro Sensor, Geomagnetic Sensor, Hall Sensor, Proximity Sensor, RGB Light Sensor	Accelerometer, Sensor, Gyro Sensor, Compass, Proximity Sensor, RGB Light Sensor, Pressure; Optional barcode imager and UHF RFID	Ambient Light, Compass, Accelerometer, Gyroscope Optional barcode imager and UHF RFID	Gyroscope, Accelerometer, Magnetometer,	Accelerometer, Sensor, Gyro Sensor, Compass, Proximity Sensor, RGB Light Sensor, Pressure; Optional barcode imager and UHF RFID	Accelerometer, Sensor, Gyro Sensor, Compass, Proximity Sensor, RGB Light Sensor, Pressure	Ambient Light, Compass, Accelerometer, Gyroscope Optional barcode imager and UHF RFID	E Compass, G Sensor, Light
<b>Cellular Capability:</b>		LTE Cat 6 - AT&T, Verizon, T-Mobile	4G/LTE (1,2,3,4,5,7,8,17,20,28,38,39,40,41)	4G LTE, Dual Nano SIM card slots FDD-LTE, TDD-LTE, GSM, TD-SCDMA, EVDO, WCDMA	Proximity, Ambient light, Compass	4G/LTE (1,2,3,4,5,7,8,17,20,28,38,39,40,41)	5G- 2,5,7,12,13,14,25,26,29,30,38,41,48,66,70,71,77,78, 4G/LTE - 2,4,5,7,12,13,14,17,25,26,29,30	4G LTE multi-carrier capable	GSM, GPRS, EDGE, UMTS, WCDMA, HSPA, LTE
<b>Measurements (in):</b>		5.0 in x 8.5 in x 0.4"	7.5 in x 3.5 in x 0.5 in	9.26 x 5.75 x 0.5 in	6.6 in x 2.8 in x 1 in	9.8 in x 5.7 in x 0.5 in	7.5 in x 3.1 in x 1.3 in	8.5 in x 5.4 x 1.4 in	11.6 in x 4.7 in x 1.8 in
<b>Weight (oz):</b>		15.0 oz	13.4 oz	19.2 oz	9.5 oz	22.4 oz	17.3 oz	24 oz	30 oz
<b>Ports:</b>		USB Type-C 3, 3.5 mm	USB Type-C; Back Connector for Expandability	USB Type-C; Back Connector for Expandability	Type-C, OTG	USB Type-C; Back Connector for Expandability	Fast charging Type-C, OTG, USB A host, RS232/RS422/RS485	USB-C, Optional RS-232, Dock Connector	USB 2.0
<b>WiFi:</b>		Wifi 6, MIMO	Wi-Fi 802.11 a/b/g/n/ac (2.4GHz+5GHz)	2.4 GHz & 5 GHz (802.11 a/b/g/n/ac)	2.4GHz/5GHz 802.11a/b/g/n/r/ac	Wi-Fi 802.11 a/b/g/n/ac (2.4GHz+5GHz)	Wi-Fi 802.11 a/b/g/n/ac (2.4GHz+5GHz)	Wi-Fi 802.11 a/b/g/n/ac, 2.4 GHz and 5 GHz	Wi-Fi 802.11 b/g/n
<b>Security:</b>		Knox 2.8	MaxGo	No	MaxGo	MaxGo	MaxGo	No	No
<b>Bluetooth:</b>		5.0, A2DP, LE	Ver 4.1	Class II, v2.1 EDR	BT 5.0 LE	Ver 4.1	BT 5.0 LE. Compatible with 2.1 EDR	Long-Range v5.0 + EDR, Class 1.5 BLE	Ver 4.0
<b>Operating Temp.:</b>		-4 to 131 °F	-4 to 131 °F	-4 to 140 °F	-4 to 140 °F	-4 to 140 °F	-22 to 140 °F	-4 F to 122 F	-4 to 140 °F