










# 2020 LandMark Spatial Solutions Android Unit Matrix

10/1/2020

									
<b>Pros:</b>		Good GPS, Rugged, Includes special Stylus. Cheapest.	Lots of storage and the most RAM	Phablet size. Rugged, great GPS, Great Price.	Easy to hold with included handstrap. Fast processor, Great GPS.	Great screen, processor, and GPS	Phablet size. Rugged, great GPS. Tons of memory.	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>		Least memory and RAM	GPS Accuracy not as good as others			Little heavier than others like it		Less Accurate GPS	Older OS, low memory and RAM
<b>Price:</b>		\$540	\$650	\$999	\$999	\$1,199	\$1,300	\$2,233	\$4995 for sub-meter
<b>Android Version:</b>		Android 7.1	Android 7.1.2	Android 8.0	Android 8.1	Android 9.0	Android 8.0	Android 9.0	Android 6.0
<b>Processor/Chipset:</b>		Octa-core 1.6GHz Samsung Exynos 7870	Qualcomm Snapdragon 653 Octa-core	2.2 Qualcomm Snapdragon 626 MSM8953 Pro, Octa-core	Qualcomm MSM8953 8-core	2.0 Qualcomm Snapdragon 625 MSM8953 Pro, Octa-core	2.2 Qualcomm Snapdragon 626 MSM8953 Pro, Octa-core	Qualcomm Snapdragon Octo-core Kt80	Snapdragon 410 Quad-core
<b>Google Mobile Certified:</b>		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
<b>Internal Memory:</b>		16GB	64 GB	32 GB	32 GB	64 GB	64 GB	64 GB eMMC Flash	16 GB
<b>Additional memory:</b>		MicroSD Card up to 256 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 128 GB	MicroSD Card	MicroSD Card up to 64 GB
<b>RAM:</b>		3 GB	6 GB	4 GB	3 GB	4 GB	4 GB	6 GB LPDDR4x	2 GB
<b>Display Size/Type:</b>		8.0" WXGA TFT (1280x800)	5.5" High-visibility AMOLED display (1920 x 1080)	6" Multi-Touch Sunlight Readable (1920 x 1080)	8" High-visibility HD IPS display (450 Nits) (1280 x 800)	8" Multi-Touch Sunlight Readable (1920 x 1080)	6" Multi-Touch Sunlight Readable (1920 x 1080)	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>		8.0MP AF + 5.0MP, Flash	Dual 12 MP Sony IMX386	13 megapixel camera with autofocus and LED flash	16 MP, Sony sensor	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	Single 16 MP Samsung S5K3P3	5 MP	5 MP	5 MP	5 MP	2 MP	2 MP
<b>IP Rating:</b>		IP 68	IP 68	IP 67	IP 67	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	
<b>Battery</b>		Li-Polymer 4450 mAh	6000 mAh	8000 mAh/30.4 Wh	8000 mAh	3.8 V/8200 mAh/31.2 Wh	8000 mAh/30.4 Wh	43.2 Wh	6400 mAh
<b>AC charge time:</b>		160 Minutes	4 hours	4 hours	4 hours	4 hours	4 hours	2 -4 hours	4 hours
<b>Battery life:</b>		Up to 11 Hours	12+ hours	15 hours	9-11 hours		15 hours	10-12 hours	8 hours
<b>GPS Receiver Type:</b>		GPS + GLONASS	GPS + ACPS + GLONASS	UBLOX GNSS Neo -M8T GPS/GLONASS/Galileo/BeiDou	GPS + GLONASS + BeiDou (UBLOX M8030)	UBLOX GNSS GPS/GLONASS/Galileo/BeiDou	UBLOX GNSS Neo -M8T GPS/GLONASS/Galileo/BeiDou	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, BDS	WAAS, EGNOS	WAAS, BDS	WAAS, BDS	WAAS, EGNOS	WAAS, EGNOS	WAAS, EGNOS, BeiDou
<b>Accuracy (Autonomous)</b>		1-3 meters	2-5 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	2-5 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	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	4G LTE - AT&T	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	4G/LTE (1,2,3,4,5,7,8,17,20,28,38,39,4, 0,41)	4G/LTE (1,2,3,4,5,7,8,17,20,28,38,39,40, 41)	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"	6.6 in x 3.3 in x 0.5 in	7.5 in x 3.5 in x 0.5 in	9.26 x 5.75 x 0.5 in	9.8 in x 5.7" x 0.5"	7.7 in x 3.6 in x 0.67 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>		14.7 oz	10 oz	13.4 oz	19.2 oz	22.4 oz	13.6 oz	24 oz	30 oz
<b>Ports:</b>		USB 2.0, Type -c, Pongo Pin	AC Adapter: 110~240 V USB Type-C	USB Type-C; Back Connector for Expandability	USB Type-C; Back Connector for Expandability	USB Type-C; Back Connector for Expandability	USB Type-C; Back Connector for Expandability	USB-C, Optional RS-232, Dock Connector	USB 2.0
<b>WiFi:</b>		Wi-Fi 802.11 a/b/g/n/ac (2.4GHz+5GHz)	2.4 GHz & Wi-Fi Hotspot	Wi-Fi 802.11 a/b/g/n/ac (2.4GHz+5GHz)	2.4 GHz & 5 GHz (802.11 a/b/g/n/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	1D/2D	MaxGo	No	MaxGo	No	No	No
<b>Bluetooth:</b>		Ver 4.2	V 4.0 BLE	Ver 4.1	Class II, v2.1 EDR	Ver 4.1	Ver 4.1	Long-Range v5.0 + EDR, Class 1.5 BLE	Ver 4.0
<b>Operating Temp.:</b>		-4 to 131 °F	-22 F to 140F	-4 to 131 °F	-4 to 140 °F	-4 to 140 °F	-4 to 131 °F	-4 F to 122 F	-4 to 140 °F