

2021 LandMark Spatial Solutions Mapping Grade Handheld Matrix

2-18-22

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|---------------------------------------|--|---|---|---|---|---|--|---|
| Pros: | Good Numeric Keypad, Good GPS | Resistive Screen, Qerty 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 10, 7" bright screen, GPS + Glonass, Fastest Porcessor, Most Memory | |
| Cons: | Slower operation, Locks up | 1 GB Storage but can add MicroSD card. Recommnd 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 \$1169 | \$1,399 | \$1,399 | \$1699 \$1529 | \$2699 \$1799 | \$2,032 | \$2,732 | |
| 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 | Quad-core Intel® Pentium N4200 processor | |
| 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 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 | 8MP rear, 2 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 | Ublox Neo M8 72 channel High-sensitivity GPS/GLONASS receiver - L1, C/A code | |
| 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 | 2-4 meters | |
| Accuracy with SBAS (Open Sky): | 1-3 meters | 1-3 meters | 1-3 meters | 1-3 meters | 1-2 meters | 2-4 meters | 2-4 meters | |
| GPS Filtering | Yes | Yes | Yes | Yes | N/A | Yes | Yes | |
| Echo Location: | No | No | No | Yes | No | No | No | |
| Integrated 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, | |
| 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 | Class 1.5, v 2.1 EDR | |
| 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 10 or Android 5.1 | |
| Operating Temp.: | -4 to 140 °F | -13 to 158 °F | -22 °F to 140 °F | -4 to 140 °F | -22 °F to 144 °F | -22 F to 144 F | -4 F to 122 F | |