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Speed is Power

M3 MOBILE

M3 MOBILE SM30 Rugged Full Touch Mobile Handheld Computer



Specifications

- **Dimensions:** 161.64 x 78.5 x 17.5 mm
- **Weight:** 297 g
- **Display:** 5.5-inch FHD (1080 x 1920)
- **Vibration:** Electrostatic +/- 15kV air, +/-8kV contact discharge
- **Interactive Sensor Technology (IST):** Touchpanel
- **Backlight:** LED backlight display
- **Expansion Slot:** User accessible MicroSD card supports up to 2 TB
- **SIM Slots:** 1 Nano SIM and 1 eSIM (X model only)
- **Network Connections:** USB 3.1 High Speed OTG (host/client); Type C connector
- **Notification:** Audible tone, multi-color LEDs, vibration
- **Keypad:** 4 physical buttons on the bottom, 5 programmable side scan keys + power button
- **Voice Audio:** Internal speaker, two microphones with noise cancellation; vibrate alert and Bluetooth wireless headset support; high-quality speakerphone; built-in speaker and microphone

Product Usage Instructions

Data Processing and Connectivity

- The SM30 supports Wi-Fi 6E (802.11ax) with a maximum speed of 9.6 Gbps for fast wireless network performance. It also supports 2G to 5G networks for stable connectivity even with multiple device connections.

Beacon & Bluetooth

- Utilize Beacon technology for automatic tracking and Bluetooth 5.3 for enhanced security and connectivity. This includes real-time inventory management, logistics tracking, and security features.

AI Capabilities

- The SM30 is powered by AI capable of 12 trillion operations per second, enhancing barcode and QR code scanning speed, correcting damaged barcodes, and categorizing defective products in real time without the need for an internet connection.

Battery Life

- The device offers a standard 5,000mAh battery with an optional 7,000mAh battery for extended use. Enjoy 12 to 24 hours of continuous use on a single charge, even with high-performance functions.

Durability and Performance

- With an IP68 rating for water and dust resistance and MIL-STD-810G military standard certification, the SM30 ensures exceptional durability in extreme conditions like rain, dust, and shock.

FEATURES

- Android 14 GMS (supports up to 18)
- Qualcomm Dragonwing™ QCM6490 high-performance 2.7 GHz Octa-core
- 5G / Wi-Fi 6E (802.11ax)
- Bluetooth 5.3 BLE, Class 2. BLE for Beacons
- IP68 / MIL-STD-810G

- The SM30 is equipped with the Qualcomm Dragonwing™ QCM6490 processor, delivering high-performance data processing at speeds of up to 2.7GHz.
- It also features AI-based image analysis and high-speed barcode scanning, significantly enhancing workplace efficiency and performance.
- Designed for seamless operation, the SM30 ensures stable performance and maximizes productivity across various work environments.
- Additionally, it supports Android 14 through the upcoming Android 18, ensuring long-term software compatibility and regular security updates.
- With advanced wireless connectivity, enhanced security features, and AI & IoT optimizations, the SM30 maximizes operational efficiency and guarantees long-term device longevity.

Product Information

High-Speed & Stable Data Processing

- The SM30 supports Wi-Fi 6E (802.11ax) with a maximum speed of 9.6 Gbps, providing 40% faster wireless network performance compared to Wi-Fi 5 (802.11ac).
- It minimizes speed degradation even when multiple devices transmit data simultaneously and prevents network interference in multi-AP environments.
- In non-Wi-Fi environments, it supports 2G to 5G networks, enabling ultra-fast data upload and download, while ensuring stable connectivity even with multiple device connections.

Beacon & Bluetooth 5.3 for Seamless Tracking and Enhanced Security

- The SM30 is equipped with Beacon technology for automatic tracking of products, equipment, and vehicles, supports real-time inventory management and logistics tracking even without.
- Wi-Fi or GPS, and enhances security and connectivity with Bluetooth 5.3, featuring Bluetooth Low Energy SDK, SoC, and module-based Bluetooth chip, and the world's first PSA Level 3 security-certified hardware.

Enhanced Work Environment with AI

- Powered by AI capable of 12 trillion operations per second, the SM30 enhances barcode and QR code scanning speed and automatically corrects or removes noise from damaged or blurry barcodes for quick recognition.
- It also detects and categorizes defective products and parts in real time.
- Since AI processing is performed on the PDA itself, AI functions can be used without an internet connection or cloud server.

All-Day Long Battery Life

- The SM30 offers a standard 5,000mAh battery and an optional 7,000mAh battery, allowing 12 to 24 hours of continuous use on a single charge.
- Even when utilizing high-performance AI and wireless functions, it eliminates the need for frequent battery swaps, reducing downtime and cutting costs on extra batteries and chargers.

Exceptional Durability, Reliable Performance in Extreme Environments

- This industrial PDA boasts an IP68 rating for water and dust resistance and is certified with the MIL-STD-810G military standard, ensuring exceptional durability even in extreme conditions. It delivers stable performance in harsh working environments, such as rain, dust, and shock, maximizing operational efficiency in the field.

Best application solution, M3 SPEEDPACK

- M3 SPEEDPACK and its application solutions are developed by M3 Mobile to provide comprehensive device management.
- With this solution, you can fully control your devices. If you use the StartUP tool within M3 SPEEDPACK, you can scan a few barcodes via your PC and device, enabling the customization and setup of thousands of devices simultaneously.
- Moreover, StartUP is a web-based tool that operates seamlessly through a browser, regardless of location or device model.
- This allows for remote configuration and management, making deployment more flexible and efficient. Additionally, productivity and efficiency can be enhanced through various application tools.

Specifications

Physical Characteristics

- **Dimensions** 161.64 x 78.5 x 17.5 mm
- **Weight** 297 g
- **Display** 5.5-inch FHD (1080 x 1920)
- **Touchpanel** Corning® Gorilla® 5 Glass touch panel with air gap; supports dual input mode with finger, gloved finger, and stylus (conductive stylus sold separately)
- **Backlight** LED display
- **Expansion** Slot User accessible MicroSD card supports up to 2 TB
- **SIM Slots (X model only)** 1 Nano SIM and 1 eSIM
- **Network Connections** USB 3.1 High Speed OTG (host/client); Type C connector
- **Notification:** Audible tone, multi-color LEDs, vibration
- **Keypad** 4 Physical BUTTON ON THE BOTTOM 5 PROGRAMABLE SIDE SCAN KEYS + PW BUTTON
- **Voice** Internal speaker, two microphones with noise cancellation; vibrate alert and Bluetooth wireless headset support; High-quality speaker phone;
- **Audio:** Built-in speaker and microphone

Performance Characteristics

- **CPU** 2.7 GHz Octa-core processor Qualcomm Dragonwing™ QCM6490
- **Operating System** Android 14(Up to Android 18) with M3 Mobile's StartUp for control over GMS and other services; will support future Android releases, committed support for Android 15, 16, 17, and 18, pending feasibility.
- **Memory** DDR4 8GB/128GB UFS Flash
- **Power:** All models ship with rechargeable Li-Ion, 3.8V, 5,000mAh smart battery, hot swap support with temporary WWAN/ WLAN/Bluetooth session persistence, 7,000mAh Extended batteries(optional)

User Environment

- **Operating Temp.** -20°C to 50°C(-4°F to 122°F)
- **Storage Temp.** -30°C to 80°(-22°F to 176°F)

- **Humidity** 5% to 95% RH (Non-condensing)
- **Drop Specifications** 1.5m (-10°C to 50°C, without boots) 1.8m (-20°C to 50°C, with boots)
 - drops to concrete across the operating temperature range per MIL-STD-810
- **Tumble Specification** 2,000 1.6ft. /0.5 m tumbles; without boots 2,000 3.2ft. /1 m tumbles, with boots
- **Sealing** IP68
- **Vibration Sine:** 4g's peak, 5 Hz to 2 kHz,
- **Random:** .04g²/hz, 20hz to 2khz
- **Thermal Shock** -30° C to 70° C rapid transition
- **Electrostatic Discharge (ESD)** +/- 15kV air, +/-8kV contact discharge
 - +/-8kV indirect contact discharge

Interactive Sensor Technology (IST)

- **Light Sensor automatically** adjusts the brightness of the display
- **Magnetometer sensor** Compass automatically detects direction and orientation
- **Motion Sensors**, Gyro Sensor, Accelerometers: for X, Y, and Z movement, and gyroscopes for measuring the extent and rate of rotation in space
- **Proximity Sensor** Detects the presence of nearby objects without any physical contact. During a telephone call, proximity sensors play a role in detecting accidental touchscreen taps

Data Capture

- **Scanning** SE4770, SE55, SE4710
- **Rear Camera** Front CAM: 8M pixels, Rear CAM: 16 M pixels, auto-focus (PDAF)
- **NFC** ISO 14443 Type A and B; FeliCa and ISO 15693 cards; Card Emulation via Host

Wireless WAN Data AND VOICE COMMUNICATIONS (X model only)

- **Radio Frequency Band** 5G FR1: n1/2/3/5/7/8/20/28/38/40/41/66/71/77/78; 4G: B1/2/3/4/5/7/8/13/17/20/28/38/39/40/41/42/43/66/71; 3G: 1/2/4/5/8 2G: 850, 900, 1800, 1900
- **GPS:** GPS, GLONASS, Galileo, Beidou, QZSS Dual-Band GNSS—concurrent

L1/G1/E1/B1 (GPS/ QZSS, GLO, GAL, BeiDou) + L5/E5a/BDSB2a (GPS/ QZSS, GAL, BeiDou); a-GPS; supports XTRA

Wireless LAN

- **Radio** IEEE 802.11 a/b/g/n/ac/d/h/i/r/k/v/w/mc/ax; 2x2 MU-MIMO; Wi-Fi 6E (802.11ax); Wi-Fi 6E Certified; Dual Band Simultaneous; IPv4, IPv6
- **Operating Channels (depending on Regulatory)** Channel 1-13 (2412-2472 MHz): 1,2,3,4,5,6,7,8,9,10,11,12,13 Channel 36-165 (5180-5825 MHz): 36,40,44,48,52,56,60,64,100,104,108,112,116,120,124,128,132,136,140,144,149,153,157,161,165 Channel Bandwidth: 20, 40, 80 MHz Actual operating channels/ frequencies and bandwidths depend on regulatory rules and certification agency.
- **Security and Encryption** WEP (40 or 104 bit); WPA/WPA2 Personal (TKIP, and AES); WPA3 Personal (SAE); WPA/WPA2 Enterprise (TKIP and AES); WPA3 Enterprise (AES) — EAP-TTLS (PAP, MSCHAP, MSCHAPv2), EAP-TLS, PEAPv0-MSCHAPv2, PEAPv1-EAP-GTC, LEAP and EAP-PWD; WPA3 Enterprise 192-bit Mode (GCMP256) — EAP-TLS; Enhanced Open (OWE)
- **Fast Roam** PMKID caching; Cisco CCKM; 802.11r; OKC

Wireless PAN

- **Bluetooth:** Bluetooth 5.3 BLE, Class 2 BLE for beaconing

Regulatory

- **EMI/EMC** EN 301 489-1; EN 301 489-3; EN 55024; EN 55032 Class A
- **Electrical Safety** IEC 62368-1, EN 62368-1
- **RF Exposure EU:** EN 50364, EN 62369-1, EN 50566, EN 62311

Environmental Compliance

- Directive 2011/65/EU, Directive(EU)2015/863

Warranty

- Subject to the terms of M3 Mobile's hardware warranty statement, the SM30 series is

warranted against defects in workmanship and materials for 1 (one) year from the date of shipment.

- For the complete warranty statement.

Recommended Services

- M3 Mobile speed care Essential and Select: Maximize M3 Mobile device availability, device value, and operational efficiency with these fully-featured support services that set the industry bar for support.

Footnotes

- **Feature available** Q2 2025

M3 Speedpack

- M3 Speedpack solutions help you get more value out of our mobile computers by adding functionality as well as simplifying the deployment and management of our mobile devices. For more information on this M3 Mobile-only feature.”
- Application user manual / Startup PC for SOTI / Startup PC User Manual
<http://www.m3mobile.net/en/products/solution-support/m3-speedpack> M3 Speedpack is available on Android only.
- Features may vary by model, and a Support Contract may be required.

Service Center M3mobile Korea

- Chun-ui Techno Park 201-610, 202, Chunui-dong, Wonmi-gu, Bucheon,
- Gyeonggi-do, 420-857, Korea Tel: +82 32 623 0037 Fax: +82 70 4015 6323

M3mobile Germany

- **Am Holzweg 26, 65830 Kriftel, Germany**
- **Tel: +4961929222150**
- **Website** <http://itc.m3mobile.net>
- **E-mail Information Technology Team:** it@m3mobile.co.kr
- **Customer Service Team:** cs@m3mobile.co.kr

Accessories

Appearance can be changed.



2 slot charging



**4 slot charging /
ethernet**

Service Center



- **Head Office**
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Frequently Asked Questions

- **Q: What is the battery life of the SM30?**
 - **A:** The SM30 offers 12 to 24 hours of continuous use on a single charge with its standard 5,000mAh battery.
- **Q: What networks does the SM30 support?**
 - **A:** The SM30 supports Wi-Fi 6E (802.11ax) as well as 2G to 5G networks for stable connectivity.
- **Q: Is the SM30 suitable for use in extreme environments?**
 - **A:** Yes, the SM30 is certified with the MIL-STD-810G military standard and has an IP68 rating for water and dust resistance, ensuring durability in harsh conditions.

Documents / Resources

 <p>M3 SM30 X1W Rugged Full Touch Mobile Handheld Computer</p>	<p>M3 MOBILE SM30 Rugged Full Touch Mobile Handheld Computer [pdf] </p> <p>wner's Manual</p> <p>SM30, SM30 Rugged Full Touch Mobile Handheld Computer, Rugged Full Touch Mobile Handheld Computer, Full Touch Mobile Handheld Computer , Touch Mobile Handheld Computer, Handheld Computer</p>
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References

- [User Manual](#)

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