

SM30 X | W

Rugged Full-Touch Mobile Handheld Computer with Qualcomm Dragonwing™ QCM6490



- **Android 14 GMS (support 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-810H**

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.



High-Speed & Stable Data Processing

The SM30 supports Wi-Fi 6E (802.11ax) with a maximum speed of 9.6Gbps, 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 connection

Smart Location Management with BLE Beacons

M3 Mobile's latest device, the SM30, is equipped with Bluetooth Low Energy (BLE) beaconing technology to enable real-time asset tracking and efficient operations. Without the need for device pairing, it ensures stable location tracking across large workspaces and continues to transmit BLE signals even when powered off—supporting accurate indoor positioning with minimal battery consumption. This technology is highly effective for asset identification and location-based automation across industries such as logistics, retail, and transportation.

Real-Time Device Management with the Device Locator App

Built on BLE beaconing, the SM30 comes pre-installed with the Device Locator App, ready to use with no additional setup. The app utilizes BLE signals to provide precise real-time location tracking— even when the device is turned off—and features a remote sound alert function to help quickly locate misplaced devices. It is especially effective in environments requiring simultaneous management of multiple devices, significantly improving productivity and operational safety.

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-810H 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.



Specification

Physical Characteristics

Dimensions	78.5 x 161.64 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 backlight 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); USB-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 microphone 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 55°C(-4°F to 131°F)
Storage Temp.	-40°C to 80°C(-40°F to 176°F)
Humidity	5% to 95% RH (Non-condensing)
Drop Specifications	1.5m, 1.8m (with Boot) drops to concrete across the operating temperature range per MIL-STD-810H
Tumble Specification	2,000 1.6ft. /0.5 m tumbles; without boot 1,000 3.2ft. /1 m tumbles; with boot
Sealing	IP68
Vibration	Sine: 4g's peak, 5hz to 2khz, 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	eCompass 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	Detect 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	2D Imager (SE4710, SE4770), Smart Focus(SE5500)
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 (801.11ax); 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
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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

Cyber Security EN18031-1, EN18031-2

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 are warranted against defects in workmanship and materials for a period of 1 (one) year from the date of shipment. For 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 Q3 2025

M3 Speedpack

"M3 Speedpack solutions help you get more value out of our mobile computers by adding functionality as well as simplifying deployment and management of our mobile devices. For more information on these 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

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Web site <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.)



1 slot cradle



4 slot cradle



4 slot battery charger



Boot



Trigger Handle

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