# UL30 W I F

A high-performance industrial rugged computer built to withstand both extreme cold and heavy impacts



## Product Spec

- Qualcomm Dragonwing™ QCS6490 high-performance 2.7 GHz Octa-core
- Android 14 GMS/AER (Support up to 18)
- Wi-Fi 6E
- 8GB RAM / 128GB ROM
- Bluetooth 5.3 V, BLE for Beaconing
- IP67 / MIL-STD-810H
- Equipped with Scan-Window Heater & LCD Back Heater functions. (F model)

The UL30 is equipped with the Qualcomm® QCS6490 platform, delivering powerful performance and superior connectivity.
Built on a 6nm process, the 2.7GHz octa-core processor provides exceptional speed for multitasking, data processing, and AI operations, while supporting the latest wireless technologies such as Wi-Fi 6E and Bluetooth 5.3, ensuring a stable and fast communication environment anywhere. In addition, the UL30 guarantees long-term software support and offers exceptional durability — it withstands 6,000 repeated drops in a rotating barrel test (with boots) and survives direct drops from up to 3 meters, ensuring stable operation even in demanding enterprise environments.

## High-Performance Enterprise Mobile Computer with Qualcomm QCS6490

The UL30 is equipped with the top-tier Qualcomm QCS6490 chipset, delivering outstanding performance even in industrial environments. This enables seamless Wi-Fi 6E connectivity, and with 2x2 MU-MIMO technology, it can transmit data simultaneously to multiple devices, ensuring fast and stable communication even in congested network conditions. Additionally, the 2.7GHz octa-core processor provides excellent multitasking performance, handling multiple apps and data processing tasks simultaneously, while the 6nm process design enhances power efficiency for long-lasting and reliable battery operation. In particular, the Hexagon NPU, the built-in AI engine of the QCS6490, delivers exceptional performance in QCR (Quick Capture Recognition) and image recognition tasks, significantly improving data processing and operational efficiency in industrial settings.

## Smart Asset and Personnel Tracking with Location-Based Automation

The UL30 enables real-time tracking of assets and personnel in both indoor and outdoor environments. Even across large workspaces, it provides stable and efficient location tracking without the need for device pairing, while minimizing battery consumption. Additionally, this technology supports location-based automation (e.g., sending notifications, logging data, automating workflows), enhancing operational efficiency, asset management, and productivity across industries such as logistics, retail, distribution, and manufacturing.

# UL30 W I F



## Scanner and Keypad Options Customizable to User Environment

Users can choose between a 2D barcode scanner (SE4770) or a long-range barcode scanner (SE5800). Additionally, there are three keypad options-28-key, 35-key, and 53-key-allowing selection of the scanner and keypad type according to the user's needs.

## Proven Durability Through Thousands of Drop Tests

With its Boots attached, the UL30 endures 6,000 rotating-barrel free-fall cycles at 1m and withstands direct drops from 3m, proving exceptional durability even in the harshest environments. It is certified with IP67 water and dust resistance and complies with the MIL-STD-81 OH military standard, making it a truly rugged device. Ideal for logistics, manufacturing, and construction environments, the UL30 is built to withstand repeated impact and harsh field conditions with confidence.

## All-Day Long Battery Life

The UL30 comes with a standard 6,700mAh battery. The energy-efficient Qualcomm QCS6490 chipset, built on a 6nm process, optimizes power consumption across all tasks, while the Hexagon NPU's highly efficient AI computation architecture further minimizes energy usage, ensuring optimal performance without unnecessary power drain.

## F(Frozen) Model Specialized for Low Temperature Environments

The UL30 offers an F (Frozen) model designed to operate reliably in low-temperature working conditions from -30°C to 60°C. Equipped with a battery optimized for cold environments, it ensures stable performance and continuous operation even in harsh freezing conditions.

# Specification

| | UL30 W | UL30 F |
|---|---|---|

## Physical Characteristics

| | |
|---|---|
| Dimensions | 88.7 x 244.75 x 46.19 mm |
| Weight | 530 g |
| Display | 5 inch FHD (1920X1080) |
| Touchpanel | Corning® Gorilla® Glass 3<br>supports dual input mode with finger, gloved finger |
| Back Light | LED backlight display |
| Expansion Slot | User accessible MicroSD with 256GB SDXC |
| Network Connections | USB C Type via Snap on, Cradle |
| Notification | Audible tone, multi-color LEDs, vibration |
| Keypad | 6 programmable side keys<br>28key, 35key , 53 key optional |
| Voice | Internal speaker, Two microphone with noise cancellation;<br>vibrate alert and Bluetooth wireless headset support; High quality speaker phone; |
| Audio | Built-in speaker and microphone |

## Performance Characteristics

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|---|---|
| CPU | 2.7 GHz Octa-core processor<br>Qualcomm Dragonwing™ QCS6490 |
| 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 come standard with a rechargeable Li-Ion 3.8V, 6,700mAh hard pack smart battery and support hot-swap functionality that temporarily maintains WWAN/WLAN/Bluetooth sessions. |

## Data Capture

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|---|---|
| Scanning | 2D Imager (SE4770), Long Range (SE5800) |
| Rear Camera | Rear CAM : 16 M pixels auto-focus (PDAF) |
| NFC | ISO 14443 A/B, ISO 15693, Mifare HF 13.56MHz |

## Wireless LAN

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|---|---|
| Radio | IEEE 802.11 802.11 a/b/g/n/ac/ax/d/e/h/i/j/k/r/V<br>2X2 MU-MIMO Wi-Fi 6E |
| Operating Channels (depending on Regulatory) | Channel 1-13 (2412-2472 MHz): 1,2,3,4,5,6,7,8,9,10,11,12,13<br>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<br>Channel Bandwidth: 20, 40, 80 MHz<br>Actual operating channels/ frequencies and bandwidths depend on regulatory rules and certifi cation agency |
| Security and Encryption | WEP {40 or 104 bit); WPA/WPA2 Personal {TKI P, and AES);<br>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

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|---|---|
| Bluetooth | Bluetooth v5.3, 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 |
| Cyber Security | EN18031-1, EN18031-2 |

# Specification

| | UL30 W | UL30 F |
|---|---|---|
| **User Environment** | | |
| Operating Temp. | -20°C to 55°C (-4°F to 131 °F) | -30"C to 60°C (-22°F to 140°F) |
| Storage Temp. | -30°C to 80°C (-22°F to 176°F) | -40°C to 80°C (-40°F to 176°F) |
| Humidity | 5% to 95% RH (Non-condensing) | |
| Drop Specifications | 3M (With Boot)<br>2M (Without Boot)<br>drops to concrete across the operating temperature range per MIL-STD-810H | |
| Tumble Specification | 6,000 times 3.2ft / 1M (With Boot)<br>4,000 times 3.2ft / 1M (Without Boot) | |
| Sealing | IP67 | |
| Vibration | Sine: 4g's peak, 5hz to 2khz,<br>Random: .0492/hz, 20hz to 2khz<br>60 minute duration per axis, 3 axis | |
| Thermal Shock | -30° C to 70° C rapid transition | |
| Electrostatic Discharge (ESD) | +/- 15kV air, +/-8kV contact discharge<br>+/-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,<br>and gyroscopes for measuring the extent and rate of rotation in space | |
| Proximity Sensor | Detect the presence of nearby objects without any physical<br>contact, during a telephone call, proximity sensors play a role in detecting accidental touchscreen taps | |
| **Environmental Compliance** | Directive 2011/65/EU, Directive(EU)2015/863 | |
| **Warranty** | Subject to the terms of M3 Mobile's hardware warranty statement, the UL30 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. | | |

# CS Center Contact Information

## Service Center

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# Accessories

(Appearance can be changed.)

| 2 slot cradle<br>( Device, Spare Battery, USB ) | 8 slot cradle | Hand Strap |
|---|---|---|
| Boots | Forklift/Vehicle charging station | Trigger Handle |
| 4 slot smart Battery charger | 16 slot smart Battery charger | C-type USB snapon |

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