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 powers on instant ly even in low-temperature environments. Through the Heat the Wire app, built in heaters in the LCD panel and scanning window automatically preheat, preventing frost or condensation caused by sudden temperature changes (cold to warm), and ensuring a clear, ghost-free display even in freezing conditions. Equipped with a 2.7GHz octa-core processor and the latest Android 14 OS, the UL30 offers enhanced speed, security, and web compatibility. The UL30 withstands 6,000 repeated-free-fall cycles in a rotating-barrel test (with Boots) and survives 3 m direct drops, ensuring outstanding durability in the harshest environments.

Reliable Heated LCD Panel Optimized for Extreme Cold Conditions

The UL30 features a built-in heating wire in its LCD panel, supporting two heating functions via M3 Mobile's proprietary "Heat the Wire" application. The fi rst is the Scan-Window Heater, which preheats the scanning window to prevent frost and condensation. The second is the LCD Back Heater, which keeps the screen warm to minimize ghosting and ensure clear display performance even in low temperatures. These functions effectively eliminate moisture and frost caused by sudden temperature changes (e. g., cold to warm), enabling a more stable and efficient working environment.

High-Performance CPU for Fast Processing and Multitasking

Wi-Fi 6E utilizes the additional 6GHz band, which was not used by previous Wi-Fi standards, to provide wider frequency bandwidth and more high-speed channels. Combined with 2x2 MU-MIMO technology, it allows for simultaneous data transmission to multiple devices, ensuring fa st and stable connections with minimal interference and low latency-even in congested network environments.

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F(Frozen) Model Specialized for LowTemperature 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.

Long-Term Software Compatibility and Regular Security Updates

With broad OS support from Android 14 to 18, the device receives continuous security and feature updates, allowing it to stay up-to-date without the need for replacement. This extends the device's lifespan, reduces maintenance costs, and effectively lowers the user's total cost of ownership (TCO).

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.

High-Speed, Efficient Wireless Communication with Wi-Fi 6E

Wi-Fi 6E utilizes the additional 6GHz band, which was not used by previous Wi-Fi standards, to provide wider frequency bandwidth and more high-speed channels. Combined with 2x2 MU-MIMO technology, it allows for simultaneous data transmission to multiple devices, ensuring fa st and stable connections with minimal interference and low latency-even in congested network environments.

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.

Accelerate Workplace Automation with NFC

Built-in NFC enables contactless authentication, asset management, and data transfer, enhancing work speed and accuracy while accelerating automation in the workplace. ensuring fa st and stable connections with minimal interference and low latency-even in congested network environments.

Large-Capacity Battery with Up to 13 Hours of Use

The 6700mAh battery supports up to 13 hours of continuous use and features hot-swap capability, allowing battery replacement without interrupting ongoing tasks.

Clear Image and Video Capture

Featuring a 16MP rear camera with PDAF technology that compares multiple images to quickly and accurately focus, ensuring sharp photos and videos in any environment.

8GB RAM / 128GB Storage for Seamless Multitasking and Data Handling

Equipped with 8GB RAM and 128GB storage, optimized for high-performance multitasking and large data processing, maximizing stability and work efficiency in industrial environments.

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 supports dual input mode with finger, gloved finger	
Expansion Slot	User accessible MicroSD with 256GB SDXC	
Network Connections	USB 2.0 High Speed OTG (host/client)	
Notification	Audible tone, multi-color LEDs, vibration	
Keypad	6 programmable side scan keys Numeric: 30 keys / Function Numeric : 42 keys / Alpha Numeric : 51 keys	
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™ 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.	
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)	-30°C to 80°C (-22°F to 176°F)
Humidity	5% to 95% RH (Non-condensing)	
Drop Specifications	3M (With Boot) 2M (Without Boot) drops to concrete across the operating temperature range per MIL-STD-810H	
Tumble Specification	6,000 times 3.2ft / 1M (With Boot) 4,000 times 3.2ft / 1M (Without Boot)	
Sealing	IP67	
Vibration	Sine: 4g's peak, 5hz to 2khz, Random: .0492/hz, 20hz to 2khz 60 minute duration per axis, 3 axis	
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 (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	

Specification

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Wireless LAN		
Radio	IEEE 802.11 802.11 a/b/g/n/ac/ax/d/e/h/i/j/k/r/V 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 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 certifi cation agency	
Security and Encryption	WEP {40 or 104 bit); WPA/WPA2 Personal {TKI P, 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 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	
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.		
Service Center	<M3mobile Korea> Unit 1107~1109, Acetechnotower 10th round, 196, Gasan digital 1-ro, Geumcheon-gu, Seoul, Korea, 08502 E-mail : cs@m3mobile.co.kr Tel +82-2-574-0037 / Fax +82-2-566-0155	
	<M3mobile Germany> Am Holzweg 26, 65830 Kriftel, Germany Tel : +49 6192 9222 150	
Web site	http://itc.m3mobile.net	
E-mail	it@m3mobile.co.kr	
Customer Service Team	cs@m3mobile.co.kr	

Accessories

(Appearance can be changed.)

2 slot cradle (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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