

M3 UL20FX

Full Touch Ultra Rugged Computer



- Android 8.1 / 9.0 GMS / 10 GMS
- 2.2GHz Octa core CPU
- Fast charging / Battery Hot Swap
- 2D Imager, Long range Scanner
- 16.0MP Auto Focus Camera
- Defogging makes vivid window
- 4G/LTE connection
- IP67

UL20FX is a high-tech industrial mobile computer that maintains consistent and reliable performance even in low temperature environments by combining our AI defogging technology and batteries specially developed for use at low temperatures. In addition, it is possible to use it without restrictions in various industrial environments through the 4G/LTE network.

5 inch Full HD Display

With its high resolution, the large full HD screen enables users to work well and to use clearly various apps and the web. UL20FX has Corning® Gorilla® in its display and scanner windows for more robust and continuous use.

IP67 sealing

UL20FX is IP67 dust- and waterproof, so it is still useful in the harsh work environment.

Long Range Scanner

UL20 Series are equipped with a long range scanner. It is able to read targets from maximum 21.4 meters. (Depending on barcode size.)

Angled Scanner (25 degrees)

Its tilted scanner helps comfortable aiming without bending wrist while looking at front screen.

6,700mAh Battery use in cold warehouse

The capacity of the battery is 6700 mAh, and its ample capacity bears the long working hours. The battery has a special low temperature design which performs at best even in cold warehouses.

Defogging makes vivid window*

The temperature control technology, which is adopted with the automatic sensor for its display and scanner window, allows UL20FX to be active at low temperatures up to -30°C without problems.

Specification

Physical Characteristics	
Dimensions	88.7 mm x 244.75 mm x 46.19 mm
Weight	530g (2D Scanner), 580g (Long range Scanner)
Display	5 in. FHD (Full High Definition) (1920X1080) Outdoor viewable, Frost-free
Touchpanel	Corning Gorilla Glass / Capacitive multi-touch / Glove, Wet, Stylus
Backlight	LED backlight display
Expansion Slot	User accessible MicroSD with 256GB SDXC
SIM Slots	2 SIMs
Network Connections	USB 2.0 Client (C type), USB 2.0 Host (A type); WWAN, WLAN, Bluetooth and WWAN
Notification	Audible tone, multi-color LEDs, vibration
Keypad	35-Key Alpha Numeric Function key pad and, (Optional) 28-Key, 53-Key
Buttons	6 programmable side scan keys
Voice & Audio	Internal speaker, Two microphone with noise cancellation; vibrate alert and Bluetooth wireless headset support; High quality speaker phone; 1 Watt Built-in speaker and microphone
Performance Characteristics	
CPU	2.2 GHz Octa-core processor
Operating System	Android 8.1 / 9.0 GMS / 10 GMS with M3 Mobile's StartUp for control over GMS and other services; will support future Android releases.
Memory	4 GB/64 GB Flash
Power	Li-ion 3.6 V 6,700 mAh, designed for high performance in low temperatures (UL20F) Fast Charging / Battery Hot Swap
User Environment	
Operating Temp.	-30 °C to 60 °C (-22 °F to 140 °F)
Storage Temp.	-40 °C to 80 °C (-40 °F to 176 °F)
Humidity	Condensing (Condensation-free using internal heaters)
Drop Specifications	2M
Heater	Scanning window heater, LCD Heater
Sealing	IP67
Vibration	Sine: 4g's peak, 5hz to 2khz, Random: .04g ² /hz, 20hz to 2khz 60 minute duration per axis, 3 axis
Thermal Shock	-22° F to 158° F/-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, Long Range(SE4850)
Camera	Rear camera 16 MP, LED FLASH
NFC	NFC (13.56MHz) Peer-to-peer, card reader, card emulation ISO 14443 A / B, ISO 15693
Wireless WAN Data AND VOICE COMMUNICATIONS	
Radio Frequency Band	GSM : B3, B5, B8 / WCDMA : B1, B5, B8 TDD-LTE : B38, B40, B41/ FDD-LTE : B1, B3, B5, B7, B8, B20
GPS	Autonomous, Concurrent GPS; GLONASS; Galileo; Beidou, and A-GPS
Wireless LAN	
Radio	IEEE 802.11 a/b/g/n/ac/d/e/h/i/k/r/w
Wireless PAN	
Bluetooth	Bluetooth v4.1 LE Class II
Regulatory	
EMI/EMC	EN 301 489-1; EN 301 489-3; EN 55024; EN 55032 Class A
Electrical Safety	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