

# UL20

SPEED IS POWER, Your Mobile Business Partner

**UL20** is a more **stable and reliable mobile computer**. This is the mobile computer you really want for your enterprise business. With the UL20, you can run critical applications with no problems.

The UL20 is the most Advanced enterprise-ready 4G/LTE mobile computer with the highest **CPU(2.2GHz Octa Core)**. Supporting Android 8.1 operating systems, the UL20 mobile computer targets tough environment employees in scan-intensive workflows such as transport and logistics, indoor and outdoor warehouse service who want to build a truly automate mobile workspace with the modern conveniences of an all-touch smartphone and physical keypad to speed business agility. It makes reducing total cost of ownership. High end mobile applications can be guaranteed to work well on the UL20. The UL20 mobile computer is designed to support the most advanced connected mobile user experiences, facilitating large file transfers, video streaming and remote access to business applications quickly, so workers can more effectively manage a wide variety of tasks throughout the sales cycle.

Additionally, UL20 mobile computer offers **enough battery life** to last a full shift and beyond, keeping mobile workers always connected to crucial information to packaging, check stock, look up order status or scan items as they are removed for delivery. The battery hot-swap function saves time and avoids rebooting when changing a battery in the field.

The UL20 Series mobile computer offers crystal 5.0 Inch Corning® Gorilla® III Glass Glove and wet touch are basic function.



The most reliable enterprise-ready mobile computer.

The UL20 mobile computer delivers real-time connectivity and best-in-class data capture capabilities.

## Great User Interface with Android™

Full HD 5 inch Screen can be possible to manage the touch screen easily. You don't care about mistyping and adjust screen input in UL20. Moreover Big large Keypad helps you can manage the application. For the scanning data capture, wide angled Scanner helps comfortable aiming.

## UL20F

An industry-leading Technologies, UL20 is upgraded as working **under the -30°C, with Heating LCD and low temperature battery**. Name is UL20F, this will help your business extend.

# UL20

**Processor:** 2.2 GHz Qualcomm Snapdragon 626 Octa-core (Cortex A-53) and 650MHz GPU

**Operating System:** Android 8.1

**Memory:** 4GB RAM, 32GB Flash  
Up to 128GB of extended Micro SD slot

**Display:** 5.0 inch in FHD(Full High Definition : 1920 x 1080)  
\* Heating LCD is available only UL20F

**Battery:** 6,700mA  
Hot swap function allowing the user can replace battery in the field without system reboot.  
UL20 can do standby + 200 hours without recharging.

**Touch Panel:** Rugged multi-touch capacitive touch panel, optically bonded for extra durability and better sunlight view ability. Automatic detection and configuration utilizing mutual, self-capacitance modes for water rejection, use with many off-the-shelf gloves.

**Keypad:** 35-Key Alpha/Numeric+Function key pad  
And 6 Side key

**Audio:** Speaker, PTT support and Bluetooth® wireless headset support.

**Camera:** 16.0-megapixel color rear camera with autofocus, advanced software features for better image quality

Performance	CPU	2.2 GHz Octa-core processor (Qualcomm MSM8953 Cortex-A53)
	OS	Android 8.1
	RAM	4G LPDDR3 933Mhz
Option	ROM	32G eMMC
	WWAN	DATA
	Frequency	GPRS : Class 12, (DL)85.6/(UL)85.6 kbps EDGE : Class 12, 236.8 / 236.8kbps HSPA+ : (DL) 42 / (UL) 11.2 Mbps TDD-LTE : Cat4 117 / 30 Mbps FDD-LTE : Cat4 150 / 50 Mbps
	WLAN	GSM : B3, B5, B8 WCDMA : B1, B5, B8 TDD-LTE : B38, B40, B41 FDD-LTE : B1, B3, B5, B7, B8, B20 IEEE 802.11 a/b/g/n/ac 2.4G&5GHz
	Scanner	1D 2D
	Camera	L Range Pixels Flash
	Sensor	SE4850 16 M(Rear) LED Flash Gyro, Ambient light, Accelerometer, Magnetic
	GPS	A-GPS, GLONASS, Beidou, Galileo
	Bluetooth	Bluetooth Class II 4.1 LE NFC(13.56MHz)
	RFID	Frequency Type
User Environment	Display	Size
	Touch Panel	5.0" FHD IPS (1920 x 1080) Capacitive touch, Glove/Wet/Pen
	Keypad	35-Key Alpha/Numeric+Function key pad and 6 Side key
	Battery	Standard
	Interface	USB
	Extended Slot	Micro SD(up to 128GB) (SDXC/SDHC/SDIO)
	SIM	2 SIM(SIM)
	Temperature	Operating Storage
	Humidity	Drop Tumble
	Vibration	2.0M 1M/2000Cycle 4Gs Peak Sine(5Hz to 2KHz); 0.04g <sup>2</sup> /Hz Random(20Hz to 2kHz); 1 hour duration per axis, 3axis
Physical	Thermal Shock	-40℃ to 85℃ (-40°F to 185°F) rapid transition
	Sealing	IP67
	ESD Test	±15 kV air Discharge and ±8 kV Direct Discharge
	Dimension	88.7mm x 244.75mm x 46.19mm
Weight	580g	

for more information  
[www.m3mobile.net](http://www.m3mobile.net) / [www.m3mobile.co.kr](http://www.m3mobile.co.kr)

Mail : sales@m3mobile.co.kr , sales\_eu@m3mobile.co.kr

## Supported Barcode Symbologies of UL20 Series

Parameter	Default
<b>UPC/EAN</b>	
UPC-A	Enable
UPC-E	Enable
UPC-E1	Disable
EAN-8/JAN 8	Enable
EAN-13/JAN 13	Enable
Bookland EAN	Disable
Decode UPC/EAN/JAN Supplementals (2 and 5 digits)	Ignore
User Programmable Supplementals Supplemental 1: Supplemental 1:	
UPC/EAN/JAN Supplemental Redundancy	10
Decode UPC/EAN/JAN Supplemental AIM ID	Combined
UPC Reduced Quiet Zone	Disable
Transmit UPC-A Check Digit	Enable
Transmit UPC-E Check Digit	Enable
Transmit UPC-E1 Check Digit	Enable
UPC-A Preamble	System Character
UPC-E Preamble	System Character
UPC-E1 Preamble	System Character
Convert UPC-E to A	Disable
Convert UPC-E1 to A	Disable
EAN-8/JAN-8 Extend	Disable
Bookland ISBN Format	ISBN-10
UCC Coupon Extended Code	Disable
Coupon Report	New Coupon Symbol
ISSN EAN	Disable
<b>Code 128</b>	
Code 128	Enable
Set Length(s) for Code 128	Any Length
GS1-128 (formerly UCC/EAN-128)	Enable
ISBT 128	Enable
ISBT Concatenation	Disable
Check ISBT Table	Enable
ISBT Concatenation Redundancy	10
Code 128 Reduced Quiet Zone	Disable
Ignore Code 128 <FNC4>	Disable
<b>Code 39</b>	
Code 39	Enable
Trioptic Code 39	Disable
Convert Code 39 to Code 32 (Italian Pharmacy Code)	Disable
Code 32 Prefix	Disable
Set Length(s) for Code 39	2 to 55
Code 39 Check Digit Verification	Disable
Transmit Code 39 Check Digit	Disable
Code 39 Full ASCII Conversion	Disable
Code 39 Reduced Quiet Zone	Disable
<b>Code 93</b>	
Code 93	Disable
Set Length(s) for Code 93	4 to 55
<b>Code 11</b>	
Code 11	Disable
Set Lengths for Code 11	4 to 55
Code 11 Check Digit Verification	Disable
Transmit Code 11 Check Digit(s)	Disable

Parameter	Default
<b>Interleaved 2 of 5 (ITF)</b>	
Interleaved 2 of 5 (ITF)	Enable
Set Lengths for I 2 of 5	14
I 2 of 5 Check Digit Verification	Disable
Transmit I 2 of 5 Check Digit	Disable
Convert I 2 of 5 to EAN 13	Disable
I 2 of 5 Security Level	Security Level 1
I 2 of 5 Reduced Quiet Zone	Disable
<b>Discrete 2 of 5 (DTF)</b>	
Discrete 2 of 5	Disable
Set Length(s) for D 2 of 5	12
<b>Codabar (NW - 7)</b>	
Codabar	Disable
Set Lengths for Codabar	5 to 55
CLSI Editing	Disable
NOTIS Editing	Disable
<b>MSI</b>	
MSI	Disable
Set Length(s) for MSI	4 to 55
MSI Check Digits	One
Transmit MSI Check Digit	Disable
MSI Check Digit Algorithm	Mod 10/Mod 10
<b>Chinese 2 of 5</b>	
Chinese 2 of 5	Disable
<b>Korean 3 of 5</b>	
Korean 3 of 5	Disable
<b>Matrix 2 of 5</b>	
Matrix 2 of 5	Disable
Matrix 2 of 5 Lengths	14
Matrix 2 of 5 Redundancy	Disable
Matrix 2 of 5 Check Digit	Disable
Transmit Matrix 2 of 5 Check Digit	Disable
Inverse 1D	Regular
<b>Postal Codes</b>	
US Postnet	Enable
US Planet	Enable
Transmit US Postal Check Digit	Enable
UK Postal	Enable
Transmit UK Postal Check Digit	Enable
Japan Postal	Enable
Australia Post	Enable
Australia Post Format	Auto discriminate
Netherlands KIX Code	Enable
USPS 4CB/One Code/Intelligent Mail	Disable
UPU FICS Postal	Disable
<b>GS1 DataBar (formerly RSS, Reduced Space Symbology)</b>	
GS1 DataBar-14	Enable
GS1 DataBar Limited	Disable
GS1 DataBar Limited Security Level	3
GS1 DataBar Expanded	Disable
Convert GS1 DataBar to UPC/EAN	Disable

Parameter	Default
<b>Composite</b>	
Composite CC-C	Disable
Composite CC-A/B	Disable
Composite TLC-39	Disable
UPC Composite Mode	Never Linked
GS1-128 Emulation Mode for UCC/EAN Composite Codes	Disable
<b>2D Symbologies</b>	
PDF417	Enable
MicroPDF417	Disable
Code 128 Emulation	Disable
Data Matrix	Enable
Data Matrix Inverse	Regular
Decode Mirror Images (Data Matrix Only)	Never
Maxicode	Enable
QR Code	Enable
QR Inverse	Regular
MicroQR	Enable
Aztec	Enable
Aztec Inverse	Regular
Han Xin	Disable
Han Xin Inverse	Regular
<b>Symbology-Specific Security Levels</b>	
Redundancy Level	1
Security Level	1
1D Quiet Zone Level	1
Intercharacter Gap Size	Normal

#### For downloading supported Barcode Symbologies

Please visit

<http://itc.m3mobile.net>

#### You can download here

[http://itc.m3mobile.net/mainpage/list\\_document.asp?b\\_no=202&gotopage=1&con=subject&keyword=&cmd=content&bd\\_no=13&gubun=&ino=1&gbn=3](http://itc.m3mobile.net/mainpage/list_document.asp?b_no=202&gotopage=1&con=subject&keyword=&cmd=content&bd_no=13&gubun=&ino=1&gbn=3)