M3 SM20 X | W

Rugged Full-Touch Mobile Handheld Computer

- Android 12 GMS/AER (support up to 14)
- Adreno 610 GPU (Enhanced Processing Performance)
- Fast Wi-Fi and BT V5.1

- Extremely easy data capture
- Smart Battery / Hot Swap
- 16 MP Auto Focus Camera
- Smart Focus Scanner

M3 Mobile's SM20 series is the industry's first rugged full-touch mobile handheld computer with Android 12. Built on the highly successful SM15 series, the SM20 series supports the Android 12 operating system with a high-level high-end CPU design, equipped with a customized displays and smart batteries, and offers many advantages including a 16MP rear camera. In particular, more than 20 accessories are available, providing the best smartphone experience for all employees working indoors and outdoors. Device performance can also be improved and managed with the M3 SPEEDPACK (M3 Application Package). With multiple scanner options, complete battery design, and secure Android security support, the SM20 series are waiting for you.

Extremely Advanced Android platform

Equipped with advanced processors and the latest Android version, the SM20 series is the industry's first to introduce Android 12, providing the best platform support performance. Not only is it equipped with the latest Android OS, but it supports up to Android 14, so you can prepare for the future with a single SM20 device. M3 Mobile continues to provide security updates to help protect your device from the operating system, making it safe and long-lasting.

Smart Power Systems

We designed a smart battery for efficient battery management. There will no longer be a decrease in the overall performance of the device due to the aging battery. We will manage it in advance with our differentiated battery system. The standard battery supports 8-10 hours of use. If your business hours are longer, use an extended battery.

Make it easier to use

It can be reborn as a complete handheld computer with more than 20 accessories. Accessories can be used to provide hands-free mobility for

workers to take productivity to the next level. The long-range trigger handle also makes it easy to read a barcode at a distance of 15m.

Fast Wi-Fi and Bluetooth 5.1

SM20 is equipped with IEEE 802.11 ax-ready and ac Wave , which takes advantage of 802.11ac to add efficiency, flexibility and scalability, allowing increased speed, capacity and nextgeneration applications to new and existing networks. It also supports Bluetooth 5.1, increasing the application flexibility of peripherals, reducing the power required for Bluetooth, and extending the battery life of the device.

Best application solution, M3 SPEEDPACK

M3 SPEEDPACK, an application solution developed by M3Mobile. With this, you can fully manage your device. If you using the StartUp tool in M3 SPEEDPACK then the user can scan a few barcodes through your PC and device then thousands of devices can be customized and set up at once. Moreover, productivity and efficiency can be increased through various application tools.

NEW Smart Focus Scanner

Smart Focus Scanner can use scanner operating distances from a minimum of 5.6 cm to a maximum of 12.2 m. It can be used in a variety of environments because it does not require additional accessories to read long-distance barcodes. In addition, it uses a higher 4MP high resolution sensor than ever before, and uses a green laser aimer to increase visibility, allowing the barcode to be read quickly and accurately under various lighting conditions, increasing the efficiency of the operator.

Specification

Physical Characteristics

Dimensions	76.4 x 154.6 x 22 mm
Weight	270 g (including standard battery)
Display	5.0" HD IPS, 1280 x 720 pixels
Touchpanel	Corning Gorilla Glass touch panel supports dual input mode with finger, gloved finger and stylus (conductive stylus sold separately)
Backlight	LED backlight display
Expansion Slot	User accessible MicroSD with 32GB SDHC and up to 512GB SDXC
SIM Slots (X model only)	1 Mini SIM. 1 eSIM
Network Connections	USB 2.0 High Speed OTG (host/client), WLAN, Bluetooth and WWAN
Notification	Audible tone, multi-color LEDs, vibration
Keypad	Volume + / - key, Camera key, Power key 2 Scanner keys (Left, Right), 4 Bottom keys (Home, Back, Menu, Enter (Scan))
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	Qualcomm® Snapdragon™ 662 (SM6115) Octa core processor 2.0Ghz With Adreno 610 GPU
Operating System	Android 12(Up to Android 14) with M3 Mobile's StartUp for control over GMS and other services; will support future Android releases committed support for Android 14 and Android 15, pending feasibility.
Memory	DDR4 4GB/64GB UFS Flash
Power	All models ship with rechargeable Li-Ion, 3.8V, 4,100mAh smart battery, hot swap support with temporary WWAN/WLAN/Bluetooth session persistence, 6,150mAh Extended batteries(optional)

User Environment

Operating Temp.	-4° F to 140° F/-20° C to 60° C
Storage Temp.	-22°F to 176°F/-30°C to 80°C
Humidity	5% to 95% RH (Non-condensing)
Drop Specifications	1.2m / 1.8m (with bumper boot)
Tumble Specification	0.5M/1000Cycle, 1M/500Cycle (with Boots)
Sealing	IP65 / IP67 (Optional)
Vibration	Sine: 4g's peak, 5hz to 2khz, Random: .04g²/hz, 20hz to 2khz
Thermal Shock	-40° F to 158° F/-40° C to 70° C
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	SE4710, SE55
Rear Camera	Front CAM : 5M pixels, Rear CAM16 M pixels auto-focus (PDAF)
NFC	ISO 14443 A/B, ISO 15693, Mifare, P2P mode and Card Emulation via Host (HCE) support

Wireless WAN Data AND VOICE COMMUNICATIONS (X model only)

Radio Frequency Band	Support VoLTE LTE FDD: 800/850/900/1800/2100/2600 (1/3/5/7/8/20); LTE TDD: 2600/2300/2500 (38/40/41); UMTS/HSDPA/HSPA+: 850/900/2100(1/5/8); GSM/GPRS/EDGE: 850/900/1800 (3/5/8);
GPS	GPS/Glonass/BeiDou/Galileo/QZSS/SBAS/NavIC(IRNSS)

Wireless LAN

Radio	IEEE 802.11 a/b/g/n/ac/d/e/h/i/k/r/w, ax-ready, ac Wave 2
Data Rates	5GHz: 802.11a/n/ac/ax — up to 433 Mbps 2.4GHz: 802.11b/g/n — up to 72 Mbps
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 56,60,64,100,104,108,112,116,120,124,128,132,136,1 40,144,149,153,157,161,165 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 5.1 Bluetooth Low Energy (BLE) Support

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

Environmental Compliance

Directive 2011/65/EU, Directive(EU)2015/863

Warranty

Subject to the terms of M3 Mobile's hardware warranty statement, the SM20 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 2022

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
Chun-ui Techno Park 201-610, 202, Chunui-dong, Wonmi-gu, Bucheon, Gyeonggi-do, 420-857, Korea Tel: +82 32 623 0037 Fax: +82 70 4015 6323

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.)

2 slot charging / ethernet / HDMI cradle

USB Charging Snap on / UHF Snap on

8 slot charging / ethernet cradle

Trigger Handle / UHF GUN

Holster

Arm Band

Vehicle cradle

Head Office
Tel: +82 2 574 0037
Fax: +82 2 558 1253
www.m3mobile.net,
sales@m3mobile.co.kr
sales_kr@m3mobile.co.kr

German Office
Tel +49 61929222148
sales_eu@m3mobile.net

France Office
Mobile +33-(0)686550492
sales_eu@m3mobile.net

UK Office
Tel +49 61929222148
sales_eu@m3mobile.net

Spain Office
Mobile +49 61929222148
sales_eu@m3mobile.net

Turkey Office
Tel +90 070-4801-0358
Mobile +90 533 049 41 30
sales@m3mobile.co.kr

Russia Office
Mobile +7 916 990 90 71
sales@m3mobile.co.kr