



M3 Mobile SM20 – Latest technology and high robustness in a compact device

- ✓ 5 inch display for optimal display of apps and multimedia content
- ✓ Powerful barcode scanning engine and high quality cameras
- ✓ Robust and weatherproof with IP65 and IP67 protection, operating range from -20 ° to 60 °C
- ✓ Long battery life and smart battery management
- ✓ Extensive range of accessories, including docking station, cradle and handle

Features

Readable codes: 1D, 2D

Display: 5 inch, 1280 x 720 px, Corning Gorilla Glass

Operating system: Android 11

Processor: Qualcomm Snapdragon 662

Memory: 4 GB RAM, 64 GB (512 GB) Flash

Feedback: LED, sound and vibration

Buttons: 4 navigation + 2 trigger buttons

Connectivity: LTE, WLAN, Bluetooth, NFC, USB

Additional features: 16 MP + 5 MP camera, GPS

Battery: 4100 / 6150 mAh, hot swap

Protection: IP65 / IP67, drop-proof up to 1.2 m

Operating temperature: -20 - 60 °C

Dimensions (W x L x H): 76.4 x 154.6 x 22 mm

Weight: 270 g

Optional accessories

1+1, 4+4 Docking & Battery Charging Station

USB charging shoe

Gungrip

Long Range Gungrip

Vehicle mount

Arm Mount

Holster

Protective cover

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 Octa core processor 2.0Ghz With Adreno 610 GPU
Operating System	Android 11(Up to Android 13) with M3 Mobile's StartUp for control over GMS and other services; will support future Android releases.
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 Optional: SE4750 MR, SE4720
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	LTE FDD: 800/850/900/1800/2100/2600 (1/3/5/7/8/20); LTE TDD: 1600/2300/2500 (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 56,60,64,100,104,108,112,116,120,124,128,132,136,140,144,149,153,157,161,165 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
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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	
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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.