

M3T

Strong as a TANK!

High performance industrial PDA with 1.8m drop pass and IP65.



Ergonomic Design for Intensive Scanning.

M3 T is an ergonomic and super rugged industrial PDA. Especially a scan button in front of the device is aimed at scanning intensive environments such as distribution and retail market area. With this enhanced functionality, it still has remarkable features for user environment, full-ruggedness of IP65 sealing rate and 1.8M drop test result, compare to similar sized devices make users rely on M3 T's accurate and normal performance.



Key Features



1D / 2D Scanner

Superior scanner / imager application provides real-time data capture and automatic data processing so that you can expect flexibility of work and cost-efficiency.

Marvell PXA-320 806 MHz

Powerful CPU speed with "High-Tier" guarantees faster graphic process and memory access.



Powerful Processor

Maximum Data Capture



3.0M Pixels AF Camera

High resolution and auto focused functionality capture clear images of product and/or documentation.

Maximum Mobility



Multi-mode Radio

(802.11 a/b/g, Bluetooth)

Wireless data transmission through Wi-Fi, Bluetooth and HSPA+ make your business easier and provide the maximum mobility.

Extended Battery



Battery (Li-Ion 3.7V, 2,700mA / 4,800mA)

Extended battery is suitable for long shift duration. M3 T can be used even in a non-chargable environment with long last battery.

Ergonomic



Ergonomic Design

Ergonomically designed SCAN button on the front panel of M3 T makes your work easier and more convenient. Also, gives superior grip and rugged feel.



All Environment, Physical Strength



IP 65 Sealing, 1.8 m drop

M3 T is suitable to use in a tough environment; withstands drop from 1.8 meter (6 feet) and protects against dust and water.



Endurance for temperature

M3 T can be operated within -20°C ~ 60°C and its storage temperature is -30°C ~ 70°C.





M3 T Specification

PHYSICAL CHARACTERISTICS

Dimension

Standard 168.8 mm x 77 mm x 28 mm, 6.6" x 3.0" x 1.1"



M3 T
Weight: 378 g (13.3 oz.)

Weight (incl. battery)

Standard 378 g, 13.3 oz.

Display 3.5" QVGA TFT LCD, 240 x 320 pixels

Touch Panel Glass analog resistive touch

Battery

Main Battery



Standard Smart Battery,
Li-ion 3.7 V, 2,700 mAh

Extended Smart Battery,
Li-ion 3.7 V, 4,800 mAh (optional)



Backup Battery Li-ion 3.7 V, 200 mAh (not user accessible)

Notification Vibration and LEDs

PERFORMANCE CHARACTERISTICS

Core Processor

CPU Marvell PXA-320 806 MHz

OS Microsoft® Windows Embedded CE 5.0

Memory RAM: 256 MB, ROM: 1 GB
External SD: MicroSD with SDHC (up to 32 GB)

Interfaces USB Host 1.1 / Client 1.1
Ethernet (via accessory)
RS232 Serial (via accessory)

Battery Performance

Standby 540 hours (standard), 960 hours (extended)

WIRELESS RADIO CHARACTERISTICS

Bluetooth Class II, v2.0 with EDR

GPS CHARACTERISTICS

Accuracy¹ Position 10 m, 2D RMS
Velocity 0.1 m/s
Time 1µs synchronized to GPS time
Acquisition¹ Cold Start 37 seconds
Warm Start 33 seconds
Hot Start < 1 second
Velocity limits: 515 m/s, 1000 knots
Altitude limits: 18,000 m, 60,000 ft.

WIRELESS LAN CHARACTERISTICS

Bands IEEE 802.11 a/b/g or IEEE 802.11 b/g
Chipset Broadcom BCM4318E
Data Rate 802.11a (OFDM): 6, 9, 12, 18, 36, 48, 54 Mbps
802.11b (DSSS): 1, 2, 5.5, 11 Mbps
802.11g (OFDM): 6, 9, 12, 18, 24, 36, 48, 54 Mbps

Regulatory Domain

FCC (Americas, Asia², Mid East²) MIC (TELEC) (Japan)
ETSI (Europe, Asia², Mid East², Africa) KC (KCC) (Korea)

2.4 GHz Frequency Bands

FCC 2.4 to 2.473 GHz, ETSI 2.4 to 2.483 GHz
MIC 2.4 to 2.495 GHz, KC 2.4 to 2.483 GHz

5 GHz Frequency Bands

FCC 5.15 to 5.35 GHz, 5.47 to 5.725 GHz, 5.725 to 5.82 GHz
ETSI 5.15 to 5.35 GHz, 5.47 to 5.725 GHz
MIC 5.15 to 5.35 GHz
KC 5.15 to 5.25 GHz, 5.47 to 5.725 GHz, 5.725 to 5.82 GHz

2.4 GHz Operating Channels

FCC 11 (3 non overlapping) ETSI 13 (3 non overlapping)
MIC 14 (4 non overlapping) KC 13 (3 non overlapping)

5 GHz Operating Channels

FCC 23 non overlapping ETSI 19 non overlapping
MIC 4 non overlapping KC 23 non overlapping

Security

Standards WEP, WPA, WPA2
Encryption WEP, TKIP, AES
Encryption Key Provisioning:
Static (40 and 128 bit length)
Pre-shared (PSK)
Dynamic

802.1X Extensible Authentication Protocol Types:
EAP-FAST, EAP-TLS, EAP-TTLS, PEAP-GTC,
PEAP-MSCHAPv2, PEAP-TLS, LEAP

Certification

Wi-Fi Alliance 802.11 a / b / g, WPA Enterprise, WPA2 Enterprise
CCXv4 Cisco Compatible Extensions

USER ENVIRONMENT

Operating Temperature -20 °C ~ 60°C, -4 °F ~ 140 °F
Storing Temperature -30 °C ~ 70°C, -22 °F ~ 158 °F
Humidity 93% non-condensing
Drop Test 1.8 m , 6 ft. (2 drops for each side)
IP Rating IP65
Electrostatic Discharge +/-8 kV air discharge
Clock Integrated real time clock (backup battery keeps the time info. while replacing the main battery)

¹ All SV @ -130 dBm.
² Part of the region.



M3 T Specification (contd.)

DATA CAPTURE CHARACTERISTICS

1D Scanner³ Characteristics

Light Source	650 nm visible laser diode
Scan Rate	100 scans/sec
Decode Rate	100 decodes/sec
Reading Angle	54°, effective 44°
Pitch Angle	+/- 35°
Skew Angle	+8° ~ +50°, -8° ~ -50°
Tilt Angle	+/- 20°
Ambient fluorescent light rejection	4,000 lux max.
Ambient white light rejection	4,000 lux max.
Ambient direct sun light rejection	8,000 lux max.
Laser Safety Class	IEC825, Class I laser product
EMC	EN 55022, EN 55024



2D Imager³ Characteristics

Focal Point	17.8 cm, 7"
Image Sensor	752 x 480 CMOS seensors
Motion Tolerance	10.2 cm, 4" per second
Rotational Sensitivity	360°
Viewing Angle	+/- 40°
Ambient Light	Total darkness to 100,000 lux (full sunlight)
Illumination LEDs	626 nm +/- 30 nm
Aiming	LEDs: 526 nm +/- 30 nm Laser: 650 nm +/- 10 nm



Camera Characteristics

Resolution	3.2 M pixel
Flash	User controllable LED flash
Focus	Auto focus

Certifications and Partners



Accessories

Extra Accessories specifically designed for M3T enhances the PDA's functionality and broaden its applicable area. Pistol Grip and Leather case may be purchased separately if necessary.

Cradles



M3 T has various types of cradle for charging and DataSync. Besides the basic Single Slot Cradle, Single Slot Ethernet Cradle can be used for Ethernet and Vehicle Cradle is for charging M3 T device in the car.

Pistol Grip

Optional pistol grip is for scan-intensive environments. This handy equipment will improve your ergonomics and increase your satisfaction.



Leather Case

To be handy for carrying and protect M3 T from any circumstances, a leather case will be a good solution. Users can choose belt type or strap type with this optional accessory.



* Each extra accessory's manual can be downloaded at M3 Mobile technical support webpage. <http://support.m3mobile.co.kr>

³ Characteristics are based on the default option.

