

MC405

Handheld Data Terminal PDA

Professional English Specification | Version 1.3



Android 11

Enterprise-ready platform

4G + Wi-Fi 5

Reliable field connectivity

IP67 Rugged

Built for harsh environments

Product Overview

The MC405 is a rugged handheld data terminal designed for barcode-based mobile workflows in warehousing, logistics, retail store operations, delivery, and field service. It combines an Android 11 operating system, MTK6765 octa-core platform, professional 1D/2D barcode scanning, dual-SIM 4G connectivity, Wi-Fi 5, Bluetooth, NFC, GNSS positioning, and a durable IP67-rated enclosure in a compact 4-inch form factor.



Slim rugged body with side scan key



Rear camera, scan module and removable battery cover

Key Advantages

- Professional barcode capture: dedicated scan engine supports mainstream 1D and 2D symbologies for daily enterprise operations.
- Rugged and field-ready: IP67 protection, 1.5 m multiple-drop resistance, and wide operating temperature range from -20°C to 55°C.
- Reliable mobile computing: MTK6765 octa-core processor, 4 GB RAM and 64 GB ROM for Android business applications.
- Flexible connectivity: 2G/3G/4G, Wi-Fi 5 dual-band, Bluetooth, NFC, and multi-constellation GNSS positioning.
- Long operating endurance: 5000 mAh removable Li-polymer battery with Type-C and 2-pin cradle charging options.
- Practical keypad design: numeric keypad, scan keys, function keys, directional keys and Fn key for fast operation with gloves or wet hands.

Application Scenarios

MC405 is suitable for high-frequency barcode and data collection tasks where mobility, durability, and stable wireless communication are required.



Warehousing: shelf and carton barcode scanning



Logistics: parcel loading, delivery and route operations



Retail store: inventory checking and item management



Field delivery: mobile confirmation and barcode capture

Technical Specifications

Category	Item	Specification
Performance	Processor	MTK6765 octa-core processor; 4 x Arm Cortex-A53 up to 2.3 GHz and 4 x Arm Cortex-A53 up to 1.8 GHz
Performance	Operating System	Android 11, without GMS package
Performance	Application Support	Compatible with scanning assistant and third-party barcode scanning business APKs
Performance	Memory	RAM 4 GB; 1 x LPDDR3 @ 933 MHz / 2 x LPDDR4x @ 1600 MHz
Performance	Storage	ROM 64 GB; supports MicroSD card expansion
Basic Specifications	Dimensions	168 x 66 x 18.5 mm, excluding local protrusions; actual product shall prevail
Basic Specifications	Weight	Approx. 265 g, including battery
Basic Specifications	Color	Black
Display & Touch	Display	4-inch TFT IPS display; WVGA 480 x 800 resolution
Display & Touch	Touch Panel	Multi-point capacitive touch; supports glove mode and wet-hand mode
Display & Touch	Lamination	Full lamination
Power	Battery	5000 mAh Li-polymer battery, 4.4 V; tool-free removable design
Power	Charging Input	5 V / 2 A
Power	Charging Time	Approx. 4.5 hours with 10 W charger; approx. 3 hours with 15 W fast charger
Audio	Microphone	Microphone, optional AI noise reduction
Audio	Speaker	2 W high-power speaker
Audio	Receiver	Built-in receiver
Interface	USB	USB 2.0; standard Type-C port, USB 2.0 Device, OTG supported
Interface	Cradle Charging	2-pin charging cradle connector, 5 V / 2 A
Keys	Physical Keys	Power key, 3 scan keys, Fn key, 2 function keys, 4 direction keys, and 16 numeric/function keys
Camera	Rear Camera	13 MP main camera, PDAF, F2.2; flash supported, up to 1 A current, flashlight function supported

Category	Item	Specification
Sensors	Sensors	Proximity/light sensor and G-sensor
Barcode Scanning	Scan Engine	Professional scan engine supporting mainstream 1D and 2D barcodes
SIM / Expansion	Card Slot	Nano-SIM x 2 or Nano-SIM + MicroSD
LED Indicator	Tri-color LED	Low battery slow flashing; charging red; fully charged green; scan success green; scan failure red; Bluetooth and other notifications blue
Cellular	SIM Function	Dual SIM dual standby; primary/secondary SIM switching supported
Cellular	Voice Services	VoLTE, ViLTE, VoWiFi
Cellular	Network Type	2G / 3G / 4G
Cellular	GSM	850 / 900 / 1800 / 1900 MHz
Cellular	WCDMA	B1 / B2 / B4 / B5 / B8
Cellular	LTE	B1 / B2 / B3 / B4 / B5 / B7 / B8 / B20 / B28a&b / B34 / B38 / B39 / B40 / B41
Wireless	Wi-Fi	Wi-Fi 5, dual-band 2.4 / 5 GHz; Wi-Fi roaming supported
Wireless	Wi-Fi Standards	1 stream 802.11ac/a/b/g/n; IEEE 802.11d/e/h/i/j/k/r/v compliant; 802.11w protected management frames
Wireless	Wi-Fi Security	WFA WPA, WPA3/2 Personal, AES-CCMP, WPI-SMS4, GCMP, WPS 2.0, WAPI hardware
Wireless	Wi-Fi Features	WFA, Wi-Fi Display, Wi-Fi HotSpot 2.0
Positioning	GNSS	L1 GPS / BeiDou / Galileo / GLONASS / AGPS with built-in antenna
NFC	Protocols	ISO18092, ISO14443 A/B, ISO15693, Mifare compliance
NFC	Functions	Reads second-generation ID card information; supports ID-card frequency-offset read/write mode, card emulation mode, and peer-to-peer mode
Bluetooth	Bluetooth	BLE 5.1, 3.0+HS, 2.1+EDR
Environment	Operating Temperature	-20°C to 55°C
Environment	Storage Temperature	-40°C to 70°C
Environment	Humidity	5% to 95% RH, non-condensing

Category	Item	Specification
Durability	Drop Resistance	Withstands multiple drops from 1.5 m onto smooth concrete floor
Durability	Protection Rating	IP67 rugged protection: water, dust, and shock resistance
ESD	Electrostatic Discharge	Air ± 12 kV; contact ± 8 kV
Certificates	Available Certificates	UN38.3, MSDS, air/sea transport certificate, CCC, SRRC & CTA, battery CCC certification, IP rating, military-grade related certification as applicable

Barcode Scan Engine

The integrated scan engine is configured for professional 1D/2D barcode reading. The following scan engine parameters are translated from the original Chinese specification.



Top scan window and camera area



Bottom Type-C and charging contacts

Category	Item	Specification
Scan Engine	Image Resolution	1280 x 800
Scan Engine	Shutter	Global shutter
Scan Engine	Field of View	Horizontal 39.5°; vertical 26.1°
Scan Engine	Reading Angle	Tilt $\pm 180^\circ$; pitch $\pm 60^\circ$; skew $\pm 60^\circ$
Symbologies	1D Barcodes	Code39, Code93, Code128, CodaBar, EAN-8/13, ITF25, UPCE, UPCA, ISBN13, PDF417, MAT25, MSI, Code11, IND25, CHINAPOST, PHARMA, GS1, etc.
Symbologies	2D Barcodes	DataMatrix, QR, microQR, AZTEC, HANXIN, POST, etc.

Package and Accessories

Type	Items
Standard Accessories	China-standard 5 V / 2 A power adapter x 1; Type-C data cable x 1; hand strap x 1; carton box
Optional Accessories	PD + 18 W fast charger; universal single-device charging cradle; lanyard; logo nameplate; cover protective film

Note: Product appearance, dimensions and accessory configuration may vary by project or order configuration. Final specifications are subject to the confirmed product configuration and actual delivered unit.