

# Mobile Terminal M3



The Mobile Terminal M3 was designed for industrial use and is of outstanding durability. It proved unmatched ruggedness to perform in extreme environments through a large variety of durability tests.

The combination of a powerful Intel X-scale PXA270 624 / 806 MHz processor and the user friendly Windows Mobile 6.1 / 6.5 operating system, as well as the SDRAM (up to 256 MB) and Flash memory (512 MB) allows running many different applications.

The Mobile Terminal M3 is available with 5 different powerful RFID units:

- UHF Long Range ISO 18000-6C incl. C1G2
- UHF ISO 18000-6C incl. C1G2
- HF ISO 14443 A/B, ISO 15693
- LF 125 / 134.2 kHz
- LEGIC Prime + Advant

The Mobile Terminal M3 is IP65 rated and has been designed to fit different applications. As a special feature, the Mobile Terminal M3 in HF version also has two SAM slots integrated. Thanks to this feature, this device can be used in Public Transport as well as in Mobile Payment applications. The Mobile Terminal M3 is available with different options and accessories:

## Options

- 1D / 2D Barcode Scanners
- Wi-Fi / Bluetooth
- GDM / GPRS / EDGE
- GPS
- Camera

## Accessories

- Desktop Cradle (Standard)
- 4 Slot Cradle
- Vehicle Cradle 12V
- Pistol Grip
- Rechargeable Belt Holster

## Applications:

- Contactless E-Ticket
- Logistics
- Public transport
- Cashless payment



## Technical Data

### Mechanical Specifications

Housing-Material:	ABS
Dimensions:	166 × 79 × 24 mm (without antenna)
Weight:	320 g (depends on configuration)
Protection Class:	IP65
Drop Test:	1.50 m (26 drops tested)

### Electrical Specifications

Power Supply:	100 to 240 V AC
LC Display:	3.5" colour TFT trans reflective, Resolution 240 × 320 Pixel
Keyboard:	23 alphanumeric keys, backlight, incl. 3×4 numeric keypad, On/Off button, Camera button, Scanner button
Interfaces (Standard):	USB, Bluetooth
Interfaces (option):	GSM/GPRS/EDGE, HSDPA, Wi-Fi 802.11 b/g, 2 SAM slots (HF version only)

### Environmental Conditions

Operating Temperature:	-20 °C to +60 °C
Humidity:	5 % to 95 %

### Features

Accessories (Standard):	Desktop Cradle, Power Supply, Earphones, Active Sync cable, Spare battery, Spare stylus
Accessories (Option):	4 Slot Cradle, Vehicle Cradle 12V, Pistol grip, Rechargeable Belt Holster, Leather Bag
Options:	1D Barcode Scanner, 2D Barcode Imager, Camera, GPS, Extended battery 4400 mAh (M3 Sky only)
Backup Battery:	200 mAh

### Further Specified Data

	M3 Sky	M3 Orange
CPU:	624 MHz	806 MHz
RAM / ROM memory	128 MB / 128 MB (Up to 256 MB)	256 MB / 1 GB
Operating system:	MS Windows Mobile 6.1	MS Windows Mobile 6.5
Rechargeable battery:	Li-Polymer battery 2200 mAh	Li-Polymer battery 3300 mAh
Further standard interfaces:	Mini SD Slot	Micro SD Slot
RFID options:	HF LF	UHF (Standard & Long-Range) HF LEGIC



### Order Codes

M3 Sky: R-HH-M3S-xx

M3 Orange: R-HH-M3O-xx

**RFID Unit UHF Long-Range (868 – 928 MHz)**

Protocol:	ISO 18000-6C incl. C1G2
Supported Tags:	ISO 18000-6C incl. C1G2 EPC
Operating Distance:	Up to 150 cm (depending on tag/card)
Order Code:	-UHF-LR

**RFID Unit UHF (868 – 928 MHz)**

Protocol:	ISO 18000-6C incl. C1G2
Supported Tags:	ISO 18000-6C incl. C1G2 EPC TEGO High-Memory
Operating Distance:	Up to 20 cm (depending on tag/card)
Order Code:	-UHF

**RFID Unit HF (13.56 MHz)**

Protocol:	ISO 14443 A/B ISO 15693
Supported Tags:	ISO 14443 A/B NXP Mifare + DESFire ISO 15693
Operating Distance:	ISO 14443 A/B: Up to 40 mm (depending on tag/card) ISO 15693: Up to 50 mm (depending on tag/card)
Order Code:	-HF

**RFID Unit LEGIC (13.56 MHz)**

Protocol:	ISO 14443A/B ISO 15693 LEGIC Prime LEGIC Advant
Supported Tags:	LEGIC Prime LEGIC Advant ISO 14443 A/B NXP Mifare + DESFire family ISO 15693
Operating Distance:	ISO 14443 A/B: Up to 40 mm (depending on tag/card) ISO 15693: Up to 50 mm (depending on tag/card) LEGIC Prime + Advant: Up to 40 mm (depending on tag/card)
Order Code:	-LEG

**RFID Unit LF (125 kHz)**

Protocol:	125 kHz / 134.2 kHz
Supported Tags:	NXP Hitag 1, 2, S EM4x02 EM4x05 (FDXB) EM4x50 SOKYMAT Q5 TI TIRIS
Operating Distance:	Up to 50 mm (depending on tag/card)
Order Code:	-LF