



Mobile Computer MC 9090^{ex}-K and -G with external RFID Reader

Description

The MC 9090^{ex} Mobile Computer is a robust device for reliably scanning barcodes and reading RFID tags in hazardous areas.

The scan trigger is positioned in such a way that barcodes and RFID tags can be captured very conveniently. The integrated radio module enables real time data access to your host system.

The MC 9090^{ex} combines the strength of Microsoft's Pocket PC platform with the power of the Intel® XScale™ PXA270 processor with 624 MHz.

A further highlight is the large easy-to-read 1/4 VGA color display with touchscreen technology.

The MC 9090^{ex} is working with the IEEE802.11 a/b/g (Direct sequence).

Features

- International approvals for global usability
- WLAN radio standard IEEE 802.11 a/b/g
- Battery can be changed easily by the user
- Expanded storage capacity with replaceable SD card
- Choice of various replaceable keyboard variants
- Service contracts

Explosion protection

Ex protection type Zone 2
 II 3G Ex nA [nL] IIC T4
 -20 °C ≤ Ta +50 °C

Ex protection type Zone 22
 II 3G Ex tD A22 IP 54 T90 °C
 -20 °C ≤ Ta +50 °C

Certification

EC Declaration of Conformity applied for

Other variants are available for:

- Europe
ATEX Zone 1 and ATEX Zone 2/22
- North America
UL Class I, II, III Div 1 or 2

Technical data

Keyboard version

available with 28, 33, 43 and 53 keys

Display

3.8", 1/4 VGA colour display with touchscreen
240 x 320 pixels

LF Reader

Nominal read/write range
approx. 5 cm (1.9 inch)

Antenna

integrated in the modul

Frequency range

125/134 KHz
(automatic switched by the reader)

Barcode options

MC 9090^{ex}-K

SE 950: 1D-Standard Range Scan Engine
Reading range: approx. 10 cm up to 120 cm

SE 4400: 1D-/2D-Imager Engine

Reading range: approx. 6 cm up to 50 cm

MC 9090^{ex}-G

SE 1524: 1D-Long Range Scan Engine

Reading range: approx. 10 cm up to 12 m

Dimensions (length x width x height)

MC 9090^{ex}-K

231 mm x 91 mm x 105 mm
(9.1 inch x 3.6 inch x 4.1 inch)

MC 9090^{ex}-G

231 mm x 91 mm x 193 mm
(9.1 inch x 3.6 inch x 7.6 inch)

Weight

MC 9090^{ex}-K

approx. 1020 g (approx. 36 oz)

MC 9090^{ex}-G

approx. 1140 g (approx. 40 oz)

Ambient temperature

-20 °C up to +40 °C (-4 °F up to +104 °F)

Surface temperature

-40 °C up to +70 °C (-40 °F up to +158 °F)

Charging temperature

0 °C up to +40 °C (+32 °F up to +104 °F)

Humidity

5 % to 95 % (non-condensing)

Protection class (EN 60529)

IP 54

CPU

Intel® XScale™ PXA270 processor/624 MHz

Memory

128/128 MB RAM/ROM option of expansion
with SD card: 512 MB, 1 GB or 2 GB

Operating system

Windows Mobile 2005

Power supply

Li-ion battery B7-A2Z0-0001
with 7.4 V/ 2200 mAh

Battery can only be charged and changed in the safe area!

Backup Battery

Ni-MH battery (rechargeable)
3.6 V/15 mAh



Interfaces

- RS232
- USB

Application development

SDK available through Motorola Developer Central Web site

Audio system

integrated microphone and loudspeaker

- Wireless data communication (WLAN)

Radio standard

IEEE 802.11a/b/g

Data rate/Frequency range

IEEE802.11a: up to 54 Mbit/s - 5 GHz

IEEE802.11b: up to 11 Mbit/s - 2.4 GHz

IEEE802.11g: up to 54 Mbit/s - 2.4 GHz

Output power

100 mW (international)

Antenna

integrated in the device

Note

The use of channels and frequencies is subject to country-specific regulations.

- Bluetooth (WPAN)

Bluetooth Version 1.2 with BT Explorer (manager included)

Maximum data rate

1 Mbit/s

Antenna

integrated in the device

Standards supported through Firmware

| Btrw-rw.V.1.40.frm | Btrw-hdx.V.1.40.frm | Btrw-ti.V.1.40.frm |
|--------------------|---------------------|--------------------|
| HITAG S256 | HDX -RO | EM 4450/4550 |
| HITAG S 2 kbit | HDX (Multipage) | EM4xxx (UNIQUE) |
| HITAG 1 | EM4xxx (UNIQUE) | FDX-B |
| HITAG 2 | FDX-B | BDE |
| Q5 | BDE | ISO 11784/5 |
| ATA5567 | ISO 117845 | ISO Animal |
| EM4305 | ISO Animal | |

Mobile Computer MC 9090^{ex}-K / MC 9090^{ex}-G

1D-Codes:

| | |
|-----------------|-----------------------|
| Code 11 | Interleaved 2 of 5 |
| Code 39 | MSI |
| Code 93 | UPCA |
| Code 128 | UPCE |
| Codabar | UPC/EAN supplementals |
| Coupon Code | Trioptic 39 |
| Chinese 2 of 5 | RSS-14 |
| Discrete 2 of 5 | RSS Expanded |
| EAN-8 | RSS Limited |
| EAN-13 | Webcode |

Mobile Computer MC 9090^{ex}-K

2D-Codes:

| | |
|--------------------|-----------------------|
| Aztec | (Macro) Micro PDF-417 |
| Australian 4-state | Micro PDF-417 PDF-417 |
| Canadian 4-state | microQR |
| Composite AB | Maxi Code |
| Composite C | QR Code |
| Chinese 2 of 5 | TLC39 |
| Data Matrix | UK 4-state |
| Dutch Kix | US Planet |
| Japanese 4-state | US Postnet |
| Macro PDF-417 | USPS 4-state (US4CB) |

Selection chart

| Mobile Computer | Barcode | Code no. | Version | Code no. | SD memory card | Code no. |
|-----------------------------------|---------|----------|--|----------|---------------------|----------|
| MC 9090 ^{ex} -G Gun | G | J | 28 keys, numeric | A | without SD card | 00 |
| | | | 33 keys, numeric | L | | |
| MC 9090 ^{ex} -K Brick | K | K | 43 keys, alphanumeric | F | SD card with 512 MB | 01 |
| | | | 53 keys, alphanumeric | E | | |
| | | A | 53 keys with layout for VT emulation | G | SD card with 1 GB | 02 |
| | | | 53 keys with layout for 3270 emulation | H | | |
| | | | 53 keys with layout for 5250 emulation | J | | |

➔ Complete order no. B7-A219-R 1/HC FA6

MC 9090^{ex}-K or -G Mobile Computer with external RFID Reader LF including Li-ion battery (1 pc.)

Please insert correct code. Technical data subject to change.

Note: All variants without accessories.

You will find the accessories with order details on the accessories pages.