



## Mobile Computer MC 9090<sup>ex</sup>-K and -G with external RFID Reader

### Description

The MC 9090<sup>ex</sup> 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<sup>ex</sup> 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<sup>ex</sup> 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

- II 2G Ex q [ib] IIC T4
- II 2G Ex q [ib] IIB T4 (Imager)

Certification applied for

For further details see EC Type Certification.

IECEX applied for

Other variants are available for:

-USA, Canada

### 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<sup>ex</sup>-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<sup>ex</sup>-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<sup>ex</sup>-K

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

##### MC 9090<sup>ex</sup>-G

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

#### Weight

##### MC 9090<sup>ex</sup>-K

approx. 1320 g (approx. 46 oz)

##### MC 9090<sup>ex</sup>-G

approx. 1400 g (approx. 49 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 prozessor/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 17-A1Z0-0001  
with 7.4 V/ 2200 mAh

Battery can be changed in the Ex 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	

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**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<sup>ex</sup>-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 <sup>ex</sup> -G Gun	G	SE 1524 1D-Long Range Scan Engine	J	28 keys, numeric	A	without SD card	00
				33 keys, numeric	L		
				43 keys, alphanumeric	F	SD card with 512 MB	01
				53 keys, alphanumeric	E		
MC 9090 <sup>ex</sup> -K Brick	K	SE 950 1D-Standard Range Scan Engine	A	53 keys with layout for VT emulation	G	SD card with 1 GB	02
				53 keys with layout for 3270 emulation	H		
		SE 4400 1D-/2D- Imager Engine	K	53 keys with layout for 5250 emulation	J	SD card with 2 GB	03

➔ Complete order no. 17-A119-R   1/HC  FA6

MC 9090<sup>ex</sup>-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.