



# Mobile Computer MC 9090<sup>ex</sup> RFID/HF for ATEX Zone 1



## 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

PTB 05 ATEX 2055

For further details see EC Type Certification.

IECEX applied for

Other variants are available for:

- USA, Canada
- ATEX Zone 2/22

### 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

#### HF Reader

Nominal read/write range

HF ISO 15693:

approx. 7 - 12 cm  
(approx. 2.75 - 4.72 inch)  
(by tags in cheque card format)

HF ISO 14443:

approx. 1 - 6 cm (approx. 0.4 - 2.36 inch)  
(by tags in cheque card format)

Antenna

integrated in the modul

Frequency range

13.56 MHz

#### 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 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 17-A1Z0-0001  
with 7.4 V/ 2200 mAh

Battery can be changed in the Ex area!



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## 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

ISO 14443-A compatibel (e.g. mifare, mifare Ultra Light, my-d proximity)

ISO 14443-B compatibel

ISO 15693 compatibel (e.g. I. CodeSLI, Tag-It HF, my-d vicinity, STM LRI 512)

I. Code 1 (optional, via Firmware update)

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

➔ Complete order no. 17-A119-R   2/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.

**COMPANY INFO:**  
COMM-CO  
KREEKZOOM 9  
4561 GX HULST  
THE NETHERLANDS

TEL: +31114-370030  
FAX: +31114-370029  
E-MAIL: INFO@COMM-CO.COM  
WEBSITE: HTTP://WWW.COMM-CO.COM  
WEBSHOP: HTTP://WWW.ECOMMESHOP.COM

WWW.ATEXSHOP.COM  
WWW.RUGGEDSHOP.NL  
WWW.WEPAINTER.NL  
WWW.WAVECOM.COM  
WWW.EYECCTV.NL