



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

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

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 colour display with touchscreen technology.

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

Explosion protection

ATEX Ex protection type
II 2G Ex q [ib] IIC T4

Certification
PTB 05 ATEX 2055

For further details see EC Type Certification.

IECEx Ex protection type
Ex q [ib] IIC T4

Certification
IECEx PTB 08.0012

For further details see IECEx Certificate of Conformity.

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

HF Reader
Nominal read/write range

HF ISO 15693:
up to approx. 7 - 12 cm
(approx. 2.75 - 4.72 inch)
(by tags in cheque card format)

HF ISO 14443:
up to 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^{ex}-K
SE 950: 1D-Standard Range Scan Engine
Reading range: approx. 10 cm up to 120 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 115 mm x 105 mm
(9.1 inch x 4.5 inch x 4.1 inch)

MC 9090^{ex}-G
231 mm x 115 mm x 193 mm
(9.1 inch x 4.5 inch x 7.6 inch)

Weight

MC 9090^{ex}-K
approx. 1320 g (approx. 46 oz)

MC 9090^{ex}-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: 1 GB or 2 GB

Operating system

Windows Mobile 5.0 or
Windows Mobile 6.1

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

EMDK available through Motorola Solutions
Web site

Audio system

integrated microphone and loudspeaker

Wireless data communication (WLAN)

Radio standard

IEEE 802.11a/b/g



Mobile Computer MC 9090^{ex} RFID/HF for ATEX/IECEx Zone 1

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

Supported Standards

ISO 14443-A kompatibel (e.g. mifare, mifare Ultra Light, my-d proximity)
ISO 14443-B kompatibel
ISO 15693 kompatibel (e.g. I. CodeSLI, Tag-It HF, my-d vicinity, STM LRI 512)
I. Code 1 (optional, via Firmware update)

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

Selection chart

Mobile Computer	Code no.	Barcodeerfassung	Code no.	Version	Code no.
MC 9090 ^{ex} -G Gun	G	SE 1524 1D-Long Range Scan Engine	J	28 keys, numeric	A
				33 keys, numeric	L
				43 keys, alphanumeric	F
MC 9090 ^{ex} -K Brick	K	SE 950 1D-Standard Range Scan Engine	A	53 keys, alphanumeric	E
				53 keys with layout for VT emulation	G
				53 keys with layout for 3270 emulation	H
				53 keys with layout for 5250 emulation	J

➔ Complete order no. 17-A119-R 2/HC A600

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

Please insert correct code. Technical data subject to change without notice.
 Note: All variants without accessories.
 You will find the accessories with order details on the accessories pages.

Operating system	Code no.
Windows Mobile 5.0	F
Windows Mobile 6.1	Q