illustration:
external module

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

Description

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

Features

- International approvals for global usability
- RFID/UHF with wide reading range
- 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
⟨Ex⟩II 2G Ex q [ib] IIC T4
⟨Ex⟩II 2G Ex q [ib] IIB T4
(Imager and all versions with external antenna)

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

UHF Reader
Nominal read/write range
UHF internal module:
approx. 30 - 50 cm
(approx. 11.8 - 19.6 inch)
UHF external module and external antenna:
approx. 1.5 m (approx. 59 inch)
with EPC Gen 2 Tag with Dog Bone Tag
Antenna (UPM Raflatac)
Antenna integrated in the module or external on the module
Frequency range
865.6 up to 867.5 MHz
(Europe)

Barcode options
MC 9090ex-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 9090ex-G
SE 1524:1D-Long Range Scan Engine
Reading range: approx. 10 cm up to 12 m

Dimensions (length x width x height)
MC 9090ex-K
231 mm x 91 mm x 105 mm
(9.1 inch x 3.6 inch x 4.1 inch)
MC 9090ex-G
231 mm x 91 mm x 193 mm
(9.1 inch x 3.6 inch x 7.6 inch)

Weight
MC 9090ex-K
approx. 1320 g (approx. 46 oz)
MC 9090ex-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

Mobile Computer MC 9090ex-K / MC 9090ex-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 9090ex-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	Code no.	Barcode	Code no.	UHF antenna	Code no.	Version	Code no.	SD memory card	Code no.
MC 9090ex-G Gun	G	SE 1524 1D-Long Range Scan Engine	J	external module	4	28 keys, numeric	A	without SD card	00
						33 keys, numeric	L	SD card with 512 MB	01
						43 keys, alphanumeric	F		
MC 9090ex-K Brick	K	SE 950 1D-Standard Range Scan Engine	A	external module and external antenna	7	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 ☐☐☐ HC ☐ FA6 ☐☐
MC 9090ex-K or -G Mobile Computer with external RFID Reader UHF
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.