



MC 9090^{ex}-K and -G with internal RFID reader LF

Features

- International approvals for global usability
- WLAN radio technology IEEE 802.11a/b/g
- Battery can be changed easily by the user
- Expanded storage capacity with replaceable SD card
- Various versions of replaceable keyboards
- Service contracts

Description

The MC 9090^{ex} Mobile Computer is a robust device for RFID reading in hazardous (potentially explosive) areas.

The RFID scan trigger is positioned in such a way that 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 IEEE 802.11a/b/g radio standard (direct sequence).

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 3D 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 Division 1 or 2

Technical data

Keyboard versions

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 (approx. 1.9 inch)

Antenna

Integrated in the device

Frequency range

125/134 kHz
(automatic switched by the reader)

Dimensions (height x width x depth)

MC 9090^{ex} -K
231 mm x 91 mm x 59 mm
(9.1 in x 3.6 in x 2.3 inch)

MC 9090^{ex} -G
231 mm x 91 mm x 193 mm
(9.1 in x 3.6 in x 7.6 inch)

Weight

MC 9090^{ex} -K
approx. 700 g (approx. 22 oz)

MC 9090^{ex} -G
approx. 850 g (approx. 30 oz)

Ambient temperature

-20 °C up to +50 °C (-4 °F up to 122 °F)

Surface temperature (Zone 22)

max. +90 °C (max. 194 °F)

Storage 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

Market	Applications	Users
Automobile industry (suppliers of paintwork, for paint shops, etc.)	- Material flow monitoring - Production control	Dispatch, receiving and stock management departments
Food and beverages (suppliers of aromatic substances, etc.)	- Supplier chain management - Incoming/outgoing goods, inventory management	Personnel who have received instruction on the handling of potentially explosive substances.
Petrochemicals (from production through further processing to delivery)	- Safety tests - Spare parts tracking	Maintenance and repair Personnel who have received instruction for deployment in potentially explosive areas.
Pharmaceuticals (suppliers of individual components required for production e.g. medication)	- Maintenance / repair work - Workshop communication - Conformity assessment	Production area Personnel in the production area who have received instruction on the handling of potentially explosive substances.



Processor
Intel® XScale™ PXA270 prozessor/624 MHz

Memory
RAM/ROM 128/128 MB
Additional memory (SD card)
512 MB, 1 GB, 2 GB on request

Operating system
Windows Mobile 2005 (English)

Power supply
Li-ion battery B7-A2Z0-0001
(2200 mAh/7.4 V)
The battery can be charged and changed in safe areas!

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

Interface
RS232
USB

Application development
SDK available through Symbol Developer Central Website

Audio System
Integrated microphone and loudspeaker
■ Wireless data communication (WLAN)

Radion standard
IEEE 802.11a/b/g

Data rate/frequeenca range
IEEE 802.11a: up to 54 Mbit/s - 5 GHz
IEEE 802.11b: up to 11 Mbit/s - 2.4 GHz
IEEE 802.11g: up to 54 Mbit/s - 2.4 GHz

Output power
100 mW (Germany and International)

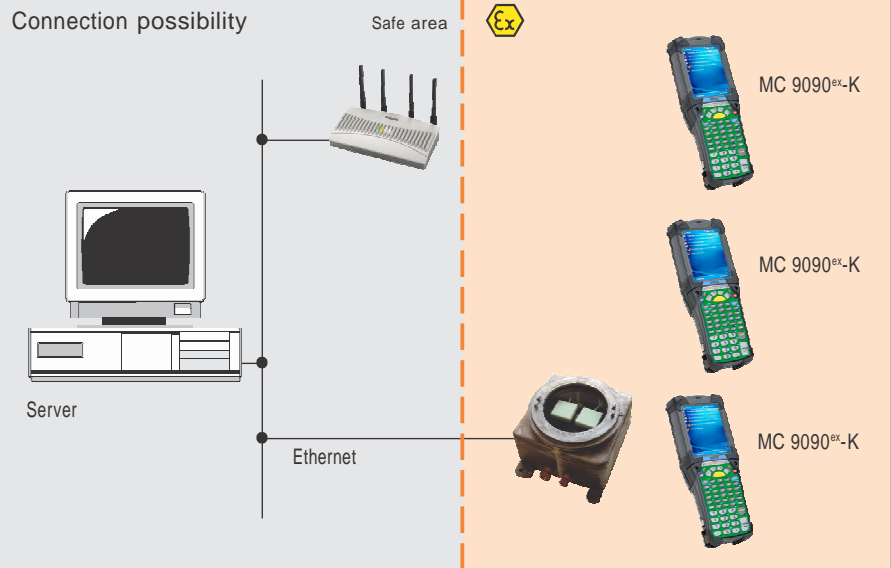
Antenna
Integrated in the device

Note
The respective radio frequencies and usable channels depend on the country-specific regulations

■ **Bluetooth (WPAN)**
Bluetooth version 1.2 radio with BT Explorer (manager included)

Max. 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	

Selection chart

Ex protection type	Code no.	Version	Code no.	SD memory card	Code no.
Gun	G	28 keys, numeric	A	without SD card	00
		33 keys, numeric	L		
		43 keys, alphanumeric	F	SD card with 512 MB	01
Brick	K	53 keys alphanumeric	E	SD card with 1 GB	02
		53 keys with layout for VT emulation	G		
		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-A219-R 05/HC FA6

including Li-ion battery (1 piece)

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.