


Mobile Computer MC 9190^{ex}-NI RFID/UHF for ATEX Zone 2 and 22

MC 9190^{ex}-NI RFID/UHF for ATEX Zone 2 and 22
Features

- WLAN radio standard IEEE 802.11 a/b/g
- Various barcode applications with various scan engines
 - 1D Barcode capture up to 12 m
 - 1D/2D Barcode capture up to 9.1 m
- Battery can be changed easily by the user
- Expanded storage capacity with replaceable SD card
- Various variants of replaceable keyboards
- Compatibility with MC9190 from Motorola
- Service contracts

Description

The MC 9190^{ex}-NI Mobile Computer with its pistol grip is a robust device for reliable barcode scanning and reading RFID tags in hazardous (potentially explosive) areas.

The scan trigger is conveniently positioned at the pistol grip. Thus barcodes and RFID tags can be captured with only one hand. The integrated radio module enables real time data access to your host system.

The MC 9190^{ex}-NI combines the strength of Microsoft's Pocket PC platform with the power of the Marvell PXA320 processor with 806 MHz.

A further highlight is the large easy-to-read 1/4 VGA colour display with touchscreen technology. The MC 9190^{ex}-NI is working with the IEEE 802.11a/b/g radio standard (direct sequence).

Explosion protection
Ex protection type Zone 2

Ex II 3G Ex nA IIC T6
-20 °C ≤ T_a ≤ +50 °C

Ex protection type Zone 22

Ex II 3D Ex tD A22 IP 64 T80 °C
-20 °C ≤ T_a ≤ +50 °C

Certification

EC Declaration of Conformity
No. B1-A283-7C0002 X

Technical data
Keyboard version

28, 43 and 53 keys

Display

3.7", VGA colour display
with touchscreen 480 x 640 pixels

UHF Reader

Nominal read/write range

UHF external module:

up to approx. 30 - 50 cm
(approx. 11.8 - 19.6 inch)

UHF external module and external antenna:

up to approx. 1.5 m (approx. 59 inch)
with EPC Gen 2 Tag with Dog Bone Tag
Antenna (UPM Raflatac)

Antenna integrated in the modul or external
on the module

Frequency range

865.6 up to 867.5 MHz (Europe)
902.0 up to 928.0 MHz (US)

Barcode options
SE1524-ER 1D Long Range Scan Engine

Reading range
up to approx. 13.7 m
up to approx. 45 feet

SE4600 1D/2D Long Range Imager Engine

Extended range omni directional reads
1D and 2D symbols
Reading range close
up to approx. 20 cm
up to approx. 8 inch

Reading range far
up to approx. 9.1 m
up to approx. 30 feet

SE4500-SR 1D/2D Imager Engine

Omni directional reads 1D and 2D symbols
Reading range close
up to approx. 5 cm
up to approx. 2 inch

Reading range far
up to approx. 62 cm
up to approx. 24 inch


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SE4500-HD 1D/2D Imager Engine with DPM reads a wide variety of DPM marks on metal, plastic and glass surfaces, including: dot peening, laser etching, molding, stamping or casting.

Reading range close
up to approx. 4 cm
up to approx. 1.6 inch

Reading range far
up to approx. 28 cm
up to approx. 11 inch

Dimensions (height x width x depth)

275 mm x 91 mm x 193 mm
10,8 inch x 3,6 inch x 7,6 inch

Weight

approx. 1140 g

approx. 40 oz

depending on version and configuration

Ambient temperature

-20 °C to +50 °C

-4 °F to +122 °F

Storage temperature

-40 °C to +70 °C

-40 °F to +158 °F

Charging temperature

0 °C to +40 °C

+32 °F to +104 °F

Humidity

5 % to 95 % (non-condensing))

Protection class

IP 64

Processor

Marvell PXA320-Prozessor/806 MHz

Memory

256 MB RAM/1 GB Flash

with the option of expansion with SD card:
up to 32 GB

Operating system

Windows Mobile 6.5

Power supply

Li-ion battery B7-A2Z0-0006

with 7.4 V/2200 mAh

The battery can only be charged and changed in the safe area!

Backup battery

Ni-MH battery (rechargeable)

Interfaces

- RS232

- USB

Application development

SDK available

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 (US 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 2.1 with BT Explorer

Antenna

Integrated in the device

The MC 9190^{ex}-NI Mobile Computers with 1D-Scan Engine or with 1D-/2D-Imager Engine recognise the following barcodes:

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

2D-Codes: (only 1D-/2D-Imager Engine)

Aztec	(Macro) Micro PDF-417
Australian 4-state	Micro PDF-417
Canadian 4-state	microQR
Composite AB	Maxi Code
Composite C	QR Code
PDF-417	TLC39
Data Matrix	UK 4-state
Dutch Kix	US Planet
Japanese 4-state	US Postnet
Macro PDF-417	USPS 4-state (US4CB)

Selection chart

Data capture options	Code no.	RFID	Code no.	Version	Code no.
SE4500-SR 1D/2D-Imager Engine	3	UHF module US frequency	5	28 keys, numeric	A
				43 keys, alphanumeric	F
SE4500-HD 1D-/2D-Imager Engine mit DPM	5	UHF module EU frequency	6	53 keys, alphanumeric	E
SE4600 1D-/2D-Long Range Imager Engine	9	UHF module US frequency + external antenna	7	53 keys with layout for VT emulation	G
				53 keys with layout for 3270 emulation	H
SE1524-ER 1D-Long Range Scan Engine	J	UHF module EU frequency + external antenna	8	53 keys with layout for 5250 emulation	J



Complete order no.

B7-A283-0G ☐ ☐ /SW ☐ **QA600**

MC 9190^{ex}-NI RFID/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.

ATEX certified UHF MOUNT ON METAL TAGS

Here you see our Long Range passive UHF ATEX RFID TAGs for industrial use and MOUNT ON METAL. These comply to ISO-IEC 18000-6. Read Only and Read Write types EPC CLASS 1 GEN 2 are available.

For IN METAL ATEX certified UHF RFID technology, see next page.



18 mm and 32 mm ATEX TAG TID-UHF-MTP17 / 32RW



36 mm x 22 mm ATEX UHF-TAG



51mm x 36 mm ATEX TAG TID-UHF-TP51RW



52 mm x 15 mm ATEX UHF-TAG



34 mm ATEX TAG TID-UHF-MTP34RW



58 mm x 50 mm ATEX UHF-TAG



150 mm x 23 mm ATEX UHF-TAG



ATEX CABLE TIE UHF-TAG

The RFID  perts

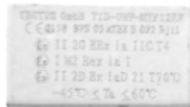
ATEX Certificate-No. BVS 11 ATEX ZQS/E262

ATEX certified UHF MOUNT IN METAL TAGs

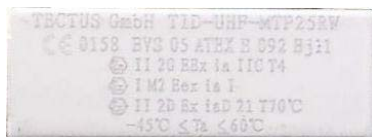
Here you see our Long Range passive UHF ATEX RFID TAGs for industrial use and MOUNT IN METAL.

These comply to ISO-IEC 18000-6.

Read Only and Read Write types EPC CLASS 1 GEN 2 are available.



12 x 7 x 3 mm ATEX UHF IN METAL-TAG



25 x 9 x 3 mm ATEX UHF IN METAL-TAG



30 x 30 x 3 mm ATEX UHF IN METAL-TAG

The RFID  perts

ATEX Certificate-No. BVS 11 ATEX ZQS/E262