



MC 9190^{ex}-NI 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 in hazardous (potentially explosive) areas.

The scan trigger is conveniently positioned at the pistol grip. Thus barcodes 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).

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

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-A283-7C0001 X

Technical data

Keyboard version

28, 43 and 53 keys

Display

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

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

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)

231 mm x 91 mm x 193 mm
 9.1 inch x 3.6 inch x 7.6 inch

Weight

approx. 710 g
 approx. 25 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.	Version	Code no.
SE4500-SR 1D/2D-Imager Engine	3	28 keys, numeric	A
		43 keys, alphanumeric	F
SE4500-HD 1D/2D Imager Engine with DPM	5	53 keys, alphanumeric	E
SE4600 1D-/2D-Long Range Imager Engine	9	53 keys with layout für VT emulation	G
		53 keys with layout for 3270 emulation	H
SE1524-ER 1D-Long Range Scan Engine	J	53 keys with layout for 5250 emulation	J

➔ **Complete order no. B7-A283-0G** **O/SW** **QA600**

MC 9190^{ex}-NI 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.