



MC 92NO^{ex}-G and -K with extended RFID Reader

Description

This unique idea enables a combination of state-of-the-art technologies and so it was possible to integrate barcode data capture and RFID technology in this one device.

Thanks to the modular keyboard and colour display, the data can be processed directly on the mobile computer. The data is transmitted to other corporate divisions via WLAN or Bluetooth. This means that the data is available in real time for further processing.

The software we offer for individual application development is an open source demo version and an SDK file. The SDK file is available for the C# programming language and contains all necessary resources for specific application development.

On the one hand, the open source demo serves to demonstrate the reading and writing of RFID tags; on the other hand, it offers application developers a good basis for customised reader programming.

The MC 92NO^{ex}-IS can be retrofitted with the RFID option in the factory. It cannot be retrofitted by the customer himself.

Features

- International approvals for global usability
- RFID/UHF with a large reading range
- RFID reader and scanner in one device
- WLAN radio standard IEEE 802.11 a/b/g/n
- Easy battery changing in the Ex area
- Expanded storage capacity with replaceable SD card
- Various versions of replaceable keyboards
- Service contracts

Explosion protection

ATEX Ex protection type

- ⊕ II 2G Ex q [ib] IIC T4 Gb
- ⊕ II 2G Ex q [ib] IIB T4 Gb (with mounted antenna)

Certification

PTB 13 ATEX 2019 X

For further details see IECEx Certificate of Conformity.

IECEx Ex protection type

- Ex q [ib] IIC T4 Gb
- Ex q [ib] IIB T4 Gb (with mounted antenna)

Certification

IECEx PTB13.0043X

For further details see IECEx Certificate of Conformity.

Other variants are available for:

- USA, Canada

Technical data

Keyboard version

- 28 keys, numeric
- 43 keys, numeric with (F) function keys
- 53 keys, alphanumeric

Display

3.7" VGA colour display with touchscreen 480 x 640 pixels

Barcode options

SE 965: 1D-Standard Range Scan Engine
Reading range: up to 2.5 m

SE 4500: 1D-/2D Imager Engine
Reading range: up to 60 cm

only for MC 92NO^{ex}-G

SE 1524: 1D-Long Range Scan Engine
Reading range: up to 12 m

Other variants available, see user's manual.

Dimensions (height x width x depth)

MC 92NO^{ex}-K
231 mm x 115 mm x 105 mm
(9.1 inch x 4.5 inch x 4.1 inch)

MC 92NO^{ex}-G
231 mm x 115 mm x 193 mm
(9.1 inch x 4.5 inch x 7.6 inch)

Weight

MC 92NO^{ex}-K
approx. 1320 g (approx. 46 oz)

MC 92NO^{ex}-G
approx. 1400 g (approx. 49 oz)

Ambient temperature

-20 °C to +40 °C (-4 °F to +104 °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 (EN 60529)

IP 54

Processor

TI OMAP 4430 dual-core® processor/1 GHz

Memory

1 GB/2 GB flash RAM/ROM with the option of expansion with SD card: up to 32 GB

Operating system

Windows Embedded Handheld 6.5.3 or Windows CE 7.0

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) 2.4 V/15 mAh

Interfaces

- RS232
- USB



Mobile Computer MC 92NO^{ex} RFID for ATEX/IECEx Zone 1

Audio System

Integrated microphone and loudspeaker

Voice support

Voice over IP

Wireless data communication (WLAN)

Radio standard

IEEE 802.11a/b/g/n

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

IEEE802.11n: up to 600 Mbit/s - 2.4/5 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 2.1 with BT Explorer (including manager)

Max. data rate

2.1 Mbit/s

Antenna

Integrated in the device

LF Reader extended

| | |
|----------------------------------|---|
| Supported standards | HITAG S256, HITAG S 2 kbit, HITAG 1, HITAG 2, Q5, ATA5567, EM4305, HDX - RO, HDX (Multipage), EM4xxx (UNIQUE), FDX-B, BDE, ISO 117845, ISO Animal, EM 4450/4550, EM4xxx (UNIQUE), FDX-B, BDE, ISO 11784/5, ISO Animal |
| Nominal reading/writing distance | approx. 5 cm/approx. 1.9 inches |
| Antenna | ferrite antenna or air coil antenna |
| Frequency range | 125/134 kHz |
| Transmitting power | 100 mW ± 2dB |

HF Reader extended

| | |
|--|--|
| Supported standards | HF ISO 15693 e.g. I-Code SLI, Tag-IT HFI, my-d vicinity, STM LRI512 HF ISO 14443 e.g. mifare, mifare Ultra Light, my-d proximity, I-Code 1 (optional) |
| Nominal reading/writing distance HF ISO 15693 HF ISO 14443 | approx. 7 to 12 cm/approx. 2.75 to 4.72 inch approx. 1 to 6 cm/approx. 0.4 to 2.36 inch (with tags in cheque card format) |
| Antenna | integrated |
| Frequency range | 13.56 MHz |
| Transmitting power | 250 mW ± 2 dB |

UHF Reader extended

| | |
|--------------------------|---|
| Supported standards | EPC Class 1 Gen 2 tag |
| Nominal reading range | approx. 30 to 50 cm/approx. 11.8 to 19.6 inch |
| Nominal writing distance | approx. 30 to 50 cm/approx. 11.8 to 19.6 inch |
| Antenna | integrated |
| Frequency range | Europa 865.6 to 867.5 MHz (EN 302 208) USA 902.0 to 928.0 MHz (FCC CFR 47 part 15.247) |
| Transmitting power | 200 mW ± 2dB |

UHF Reader extended with mounted antenna

| | |
|--------------------------|---|
| Supported standards | EPC Class 1 Gen 2 tag |
| Nominal reading range | approx. 150 cm/approx. 59 inches |
| Nominal writing distance | approx. 150 cm/approx. 59 inches |
| Antenna | external (UPM Raflatac) |
| Frequency range | Europa 865.6 to 867.5 MHz (EN 302 208) USA 902.0 to 928.0 MHz (FCC CFR 47 part 15.247) |
| Transmitting power | 200 mW ± 2dB |

Selection chart MC 92NO^{ex}-IS with extended RFID Reader

| Barcode options | Code no. | RFID options | Code no. | Version | Code no. | Operating system | Code no. |
|---|----------|--|----------|--|----------|---------------------------------------|----------|
| SE 965 1D-Standard Range Scan Engine | A | RFID LF Reader | 2 | 28 keys, numeric | A | Windows Embedded Handheld 6.5.3 | Q |
| | | RFID HF Reader | 4 | 43 keys, numeric with (F) function keys | F | | |
| SE 4500-SR 1D-/2D Imager Engine | 3 | RFID UHF (US) Reader | 5 | 53 keys, alphanumeric | E | Windows CE 7.0 | Y |
| | | RFID UHF (EU) Reader | 6 | 53 keys, alphanumeric with layout for VT emulation | G | | |
| SE 1524 1D Long Range Scan Engine (only MC 92NO ^{ex} -G) | J | RFID UHF (US) Reader and mounted antenna | 7 | 53 keys, alphanumeric with layout for 3270 emulation | H | Windows CE 7.0 | Y |
| | | RFID UHF (EU) Reader and mounted antenna | 8 | 53 keys, alphanumeric with layout for 5250 emulation | J | | |

Complete order no.

MC 92NO^{ex} Version GUN **17-A1A3-RG** /SY **A600**
 Version BRICK **17-A1A3-RK** /SY **A600**

including Li-ion battery (1 piece). Note: All variants without accessories. You will find the accessories with order details on the accessories pages. Please insert correct code. Technical data subject to change without notice.