

Mobile Computer

MC 9090^{ex} RFID/LF

MC 9090^{ex} RFID/HF

MC 9090^{ex} RFID/UHF

Type B7-A2.9-R.../H.....



Document no. B1-A219-7D0001

Status: 4 August 2010

English

Appendix B

Supplement for User Manual

ATEX Zone 2

UL Class I Division 2

UL Class I, II, III Division 2

This appendix contains information on the RFID devices. A further applicable document is the user manual for the MC 9090^{ex} Mobile Computer for

- ATEX Zone 2 or
- UL Class I, Div 2 and
- UL Class I, II, III Div 2

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Appendix – EC-Declaration of Conformity

1 Product Description

The MC 9090^{ex} RFID/UHF mobile computer is a compact portable device and is designed by BARTEC for use in hazardous areas. Accordingly, the extensive communication options, already standard in other areas, are available to the user in hazardous areas also.



The MC 9090^{ex} RFID mobile computer is available in two versions, with pistol grip (MC 9090^{ex} Gun) and without (MC 9090^{ex} Brick). In these versions, the MC 9090^{ex} is a compact unit for scanning bar codes and RFID tags reliably.

The scan trigger is ideally positioned on the device, which allows bar codes and RFID tags to be captured easily. The integrated radio module ensures a real-time exchange of data with the host system.

The MC 9090^{ex} RFID combines the advantages of the Microsoft Pocket PC Platform with the strengths of the Intel® XScale™ PXA270 processor with 624 MHz.

The large, easy-to-read 1/4 VGA colour display is equipped with touch screen technology. The device works with the IEEE802.11 a/b/g (direct sequence) radio standard.

2 Safety Instructions

2.1 Warnings about the Mobile Computers



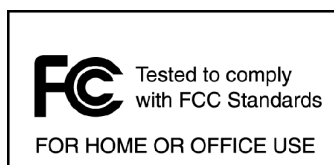
MC 9090^{ex} mobile computer types B7-A219-R..6/H....., types B7-A219-R..7/....., types B7-A219-RG.0/HJ.FR1.. and types B7-A219-RG.0/HJ.FR7.. with external RFID/UHF antenna may not be used in processes that generate high charge levels.

High charge levels can occur in particular with electrostatic painting, pneumatically conveyed dust, flowing liquids and droplets, mechanically driven belts, brushes and foils etc.

2.2 Warnings for Use of Wireless Devices

Please observe all warning notices with regard to the usage of wireless devices.

2.2.1 Radio Frequency Interference Requirements - FCC



Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation.

This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/tv technician for help.

FCC Note according to 15.21

Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Radio Transmitters (Part 15)

This device complies with Part 15 of the FCC rules. Operation is subject to the following two conditions:

- (1) this device may not cause harmful interference, and
- (2) this device must accept any interference received, including interference that may cause undesired operation.

2.2.2 Radio Frequency Interference Requirements – Canada

This Class B digital apparatus complies with Canadian ICES-003.

Cet appareil numérique de la classe B est conforme à la norme NMB-003 du Canada.

Radio Transmitters

This device complies with RSS 210 of Industry & Science Canada. Operation is subject to the following two conditions:

- (1) this device may not cause harmful interference and
- (2) this device must accept any interference received, including interference that may cause undesired operation.

Label Marking: The Term "IC:" before the radio certification only signifies that "Industry Canada" technical specifications were met.

2.3 Warnings for screen protection



The screen protection type 17-A1Z0-0003 of the MC 9090^{ex} mobile computer types B7-A219-R..6/H....., types B7-A219-R..7/....., types B7-A219-RG.0/HJ.FR1.. and types B7-A219-RG.0/HJ.FR7.. may be used only in the gas group IIB Ex.

3 Technical Data

3.1 RFID/LF Internal module/only UL

3.1.1 Explosion Protection

Types	B7-A219-R .05/H.....
Ex protection type	 II 3G Ex nA [nL] IIC T4  II 3D Ex tD A22 IP54 T90°C -20 °C ≤ Ta ≤ +50 °C B1-A219-7C0004 X
Certification	EC-Declaration of Conformity B1-A219-7C0004
Types	B7-A229-R.04/H.....
Ex protection type	Class I Division 2 Groups A, B, C and D Class II Division 2 Groups F and G Class III Division 2
Certification	UL File E321557

3.1.2 General Data

Ambient temperature	-20 °C to +50 °C	-4 °F to +122 °F
Weight including battery		
MC 9090 ^{ex} -K	approx. 700 g	approx. 22 oz
MC 9090 ^{ex} -G	approx. 850 g	approx. 30 oz

3.1.3 Radio Data Transmission RFID/LF (Internal module)

Nominal writing distance	approx. 5 cm	approx. 1.9 inch
Antenna	Integrated in the device as a ferrite antenna or air coil antenna	
Frequency range	125/134 kHz	
Transmitting power	100 mW ± 2 dB	

3.1.4 Standards supported by firmware

Firmware version Btrw-rw.V.1.40.frm	Firmware version Btrw-hdx.V.1.40.frm	Firmware version 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	

3.2 RFID/LF External module / ATEX and UL

3.2.1 Explosion Protection

Types	B7-A219-R..1/H.....
Ex protection type	 II 3G Ex nA [nL] IIC T4  II 3D Ex tD A22 IP54 T90°C -20 °C ≤ Ta ≤ +50 °C B1-A219-7C0005 X
Certification	EC-Declaration of Conformity B1-A219-7C0005
Types	B7-A229-R..1/H.....
Ex protection type	Class I Division 2 Groups A, B, C and D Class II Division 2 Groups F and G Class III Division 2
Certification	UL File E321557

3.2.2 General Data

Ambient temperature	-20 °C to +50 °C -4 °F to +122 °F
Dimension (length x width x height) MC 9090 ^{ex} -K MC 9090 ^{ex} -G	231 x 115 x 105 mm 9.1 x 4.5 x 4.1 inch 231 x 115 x 193 mm 9.1 x 4.5 x 7.6 inch
Weight including battery MC 9090 ^{ex} -K MC 9090 ^{ex} -G	approx. 1020 g approx. 36 oz approx. 1140 g approx. 40 oz

3.2.3 Radio Data Transmission RFID/LF (External module)

Nominal writing distance	approx. 5 cm approx. 1.9 inches
Antenna	Integrated in the device as ferrite antenna or air coil antenna
Frequency range	125/134 kHz
Transmitting power	100 mW ± 2 dB

3.2.4 Standards supported by firmware

Firmware Version Btrw-rw.V.1.40.frm	Firmware Version Btrw-hdx.V.1.40.frm	Firmware Version 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	

3.3 RFID/HF External Module / ATEX and UL

3.3.1 Explosion Protection

Types	B7-A219-R..2/H.....
Ex protection type	 II 3G Ex nA [nL] IIC T4  II 3D Ex tD A22 IP54 T90°C -20°C ≤ Ta ≤ +50°C B1-A219-7C0005 X
Certification	EC-Declaration of Conformity B1-A219-7C0005
Types	B7-A229-R..2/H.....
Ex protection type	Class I Division 2 Groups A, B, C and D Class II Division 2 Groups F and G Class III Division 2
Certification	UL File E321557

3.3.2 General Data

Ambient temperature	-20 °C to +50 °C -4 °F to +122 °F
Dimension (length x width x height)	
MC 9090 ^{ex} -K	231 x 115 x 105 mm 9.1 x 4.5 x 4.1 inch
MC 9090 ^{ex} -G	231 x 115 x 193 mm 9.1 x 4.5 x 7.6 inch
Weight including battery	
MC 9090 ^{ex} -K	approx. 1020 g approx. 36 oz
MC 9090 ^{ex} -G	approx. 1140 g approx. 40 oz

3.3.3 Radio Data Transmission RFID/HF External module

Nominal reader calibration width	
HF ISO 15693	approx. 7 to 12 cm approx. 2.75 to 4.72 inch
HF ISO 14443	approx. 1 to 6 cm approx. 0.4 to 2.36 inch (with tags in cheque card format)
Nominal writing distance	
HF ISO 15693	approx. 7 to 12 cm approx. 2.75 to 4.72 inch
HF ISO 14443	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

3.3.4 Standards supported by Firmware

ISO14443-A kompatibel	ISO14443-B kompatibel	ISO15693 kompatibel
e.g. mifare, mifare Ultra Light, my-d proximity		e.g. I-Code SLI, Tag-IT HFI, my-d vicinity, STM LRI512
I-Code 1 (optional)		

3.4 RFID/UHF External Module / ATEX and UL

3.4.1 Explosion Protection

Types	B7-A219-R..3/H..... B7-A219-R..4/H.....
Ex protection type	 II 3G Ex nA [nL] IIC T4  II 3D Ex tD A22 IP54 T90°C -20°C ≤ Ta ≤ +50°C B1-A219-7C0005 X
Certification	EC-Declaration of Conformity B1-A219-7C0005
Types	B7-A229-R..3/H.....
Ex protection type	Class I Division 2 Groups A, B, C and D Class II Division 2 Groups F and G Class III Division 2
Certification	UL File E321557

3.4.2 General Data

Ambient temperature	-20 °C to +50 °C	-4 °F to +122 °F
Dimension (length x width x height)		
MC 9090 ^{ex} -K	231 x 115 x 105 mm	9.1 x 4.5 x 4.1 inch
MC 9090 ^{ex} -G	231 x 115 x 193 mm	9.1 x 4.5 x 7.6 inch
Weight including battery		
MC 9090 ^{ex} -K	approx. 1020 g	approx. 36 oz
MC 9090 ^{ex} -G	approx. 1140 g	approx. 40 oz

3.4.3 Radio Data Transmission RFID/UHF External module

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	
Europe	865.6 to 867.5 MHz (EN302 208)
USA	902.0 to 928.0 MHz (FCC CFR 47 Part 15.247)
Transmitting power	200 mW ± 2 dB

3.5 RFID/UHF External Module + External Antenna / ATEX and UL

3.5.1 Explosion Protection

Types	B7-A219-R..6/H..... B7-A219-R..7/H.....
Ex protection type	 II 3G Ex nA [nL] IIC T4  II 3D Ex tD A22 IP54 T90°C -20°C ≤ Ta ≤ +50°C B1-A219-7C0005 X
Certification	EC-Declaration of Conformity B1-A219-7C0005
Types	B7-A229-R..5/H.....
Ex protection type	Class I Division 2 Groups A, B, C and D Class II Division 2 Groups F and G Class III Division 2
Certification	UL File E321557

3.5.2 General Data

Ambient temperature	-20 °C to +50 °C -4 °F to +122 °F
Dimension (length x width x height) MC 9090 ^{ex} -K MC 9090 ^{ex} -G	276 x 120 x 105 mm 10.9 x 4.7 x 4.1 inch 276 x 120 x 193 mm 10.9 x 4.7 x 7.6 inch
Weight including battery MC 9090 ^{ex} -K MC 9090 ^{ex} -G	approx. 1170 g approx. 41 oz approx. 1290 g approx. 45 oz

3.5.3 Radio Data Transmission RFID/UHF External module + External antenna

Supported standards	EPC Class 1 Gen 2 Tag
Nominal reading range	approx. 150 cm approx. 59 inch
Nominal writing distance	approx. 30 to 50 cm approx. 11.8 to 19.6 inch
Antenna	external (UPM Raflatac)
Frequency range Europe USA	865.6 to 867.5 MHz (EN302 208) 902.0 to 928.0 MHz (FCC CFR 47 Part 15.247)
Transmitting power	200 mW ± 2 dB

3.6 Special variant RFID/UHF only for Zone 2/22

3.6.1 Explosion Protection

Types	B7-A219-RG.0/H...R1..
Ex protection type	 II 3G Ex nA [nL] IIC T4  II 3D Ex tD A22 IP54 T90 °C -20°C ≤ Ta ≤ +50°C
Certification	EC-Declaration of Conformity B1-A219-7C0001

3.6.2 General Data

Ambient temperature (Zone 2)	-20 °C to +40 °C	-4 °F to +104 °F
Surface temperature (Zone 22)	max. +90 °C	max. +194 °F
Dimension (length x width x height)	273 x 119 x 195 mm	10.75 x 4.7 x 7.7 inch
Weight including battery	approx. 1150 g	approx. 36 oz
Operating system	Windows Mobile 2005 Premium (Englisch)	
Keyboard version	53 keys	

3.6.3 Radio Data Transmission RFID

Supported standards	EPC Gen 2 DRM (DRM compliant up to version 0.5w)
Data options	Gen2 Tags
Nominal reading range	approx. 6 to 300 cm approx. 2.4 to 120 inch
Nominal writing distance	approx. 30 to 60 cm approx. 12 to 24 inch
Field	70-degree con (approx.) measured from nose of device
Antenna	integrated, linear polarized
Frequency range	865.7 - 867.5 MHz (ETSI 302 208)
Transmitting power	0.5 W

3.7 Special variant RFID/UHF only for Class I, II, III Div 2

3.7.1 Explosion Protection

Types	B7-A219-RG.0/H...R7..
Ex protection type	Class I Division 2 Groups A, B, C and D Class II Division 2 Groups F and G Class III Division 2
Certification	UL File E321557

3.7.2 General Data

Ambient temperature (Zone 2)	-20 °C to +50 °C	-4 °F to +122 °F
Surface temperature (Zone 22)	max. +90 °C	max. +194 °F
Dimension (length x width x height)	273 x 119 x 195 mm	10.75 x 4.7 x 7.7 inch
Weight including battery	approx. 1150 g	approx. 36 oz
Operating system	Windows Mobile 2005 Premium (Englisch)	
Keyboard version	53 keys	

3.7.3 Radio Data Transmission RFID

Supported standards	EPC Gen 2 DRM (DRM compliant up to Version 0.5w)
Data options	Gen2 Tags
Nominal reading range	approx. 6 to 300 cm approx. 2.4 to 120 inch
Nominal writing distance	approx. 30 to 60 cm approx. 12 to 24 inch
Field	70-degree con (approx.) measured from nose of device
Antenna	integrated, linear polarized
Frequency range	902 MHz to 928 MHz
Transmitting power	1.0 W

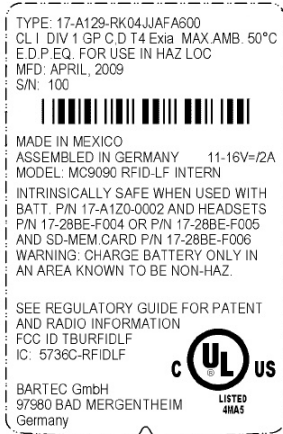
3.8 Information on Applied Directives, Standards, Marking and In-Process Inspections

3.8.1 Product Marking on Mobile Computer MC 9090^{ex} RFID internal module

MC 9090^{ex} RFID / LF internal



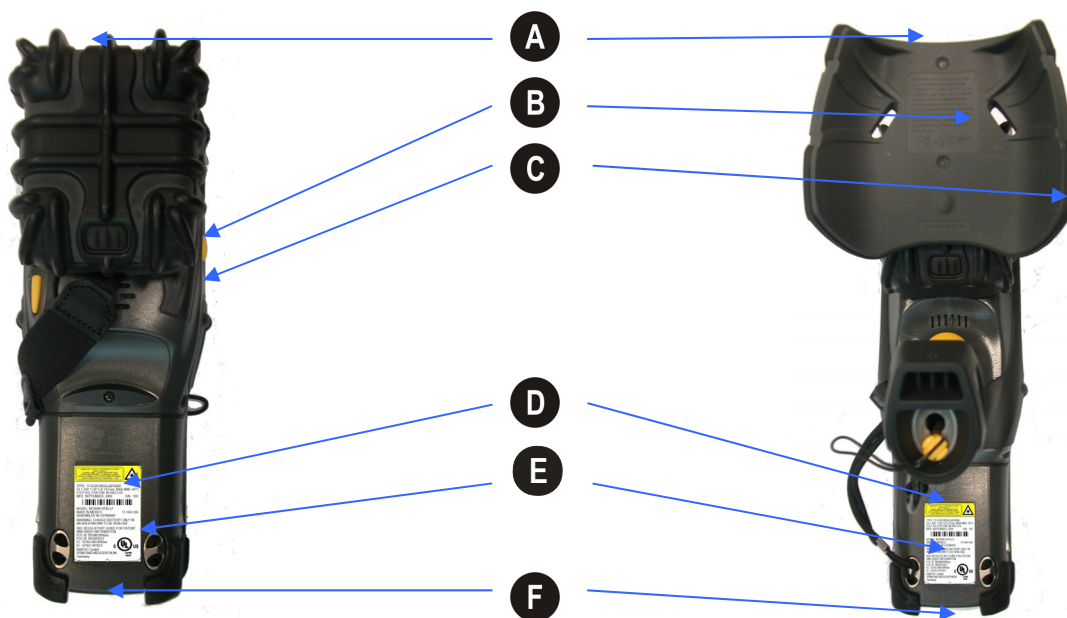
A Warning laser	No integrated scan engine!	
B FCC instructions	THIS CLASS B DIGITAL APPARATUS COMPLIES WITH CANADIAN ICES-003. CET APPAREIL NUMERIQUE DE LA CLASSE B EST CONFORME A LA NORME NMB-003 DU CANADA. FC WARNING: SUBSTITUTION OF PARTS MAY IMPAIR INTRINSIC SAFETY. TO PREVENT IGNITION OF FLAMMABLE OR COMBUSTIBLE ATMOSPHERES, DISCONNECT POWER BEFORE SERVICING. READ, UNDERSTAND AND ADHERE TO THE OPERATIONAL MANUAL.	
C Ex protection type	see type label MC 9090 ^{ex} RFID/LF internal	
	Type B7-A219-...	Ex II 3G Ex nA [nL] IIC T4 Ex II 3D Ex tD A22 IP54 T90°C -20°C ≤ Ta ≤ +50°C B1-A219-7C0004 X
	Type B7-A229-...	Class I Division 2 Groups A, B, C and D Class II Division 2 Groups F and G Class III Division 2

D Warning laser	No Integrated scan engine!
E Type label	 TYPE: 17-A129-RK04JJAF600 CL I DIV 1 GP C D T4 Exia MAX.AMB. 50°C E.D.P. EQ. FOR USE IN HAZ LOC MFD: APRIL, 2009 S/N: 100 MADE IN MEXICO ASSEMBLED IN GERMANY 11-16V=I2A MODEL: MC9090 RFID-LF INTERN INTRINSICALLY SAFE WHEN USED WITH BATT. P/N 17-A120-0002 AND HEADSETS P/N 17-28BE-F004 OR P/N 17-28BE-F005 AND SD-MEM.CARD P/N 17-28BE-F006 WARNING: CHARGE BATTERY ONLY IN AN AREA KNOWN TO BE NON-HAZ. SEE REGULATORY GUIDE FOR PATENT AND RADIO INFORMATION FCC ID T8URFIDLF IC: 5736C-RFIDLF BARTEC GmbH 97980 BAD MERGENTHEIM Germany UL US LISTED 4MAG
F Labels in the battery compartment	Licence sticker for Windows Mobile™ 5.0 Premium operating system  Label contains details on the Motorola device before it was modified by BARTEC GmbH. - CE mark and notified body used by Motorola - Manufacturer Motorola (formerly Symbol Technologies Incorporation) - Type number (part) - Serial number ((S) S/N) Important: You will need to quote the type number and serial number when making enquiries directly to the Technical Support department at Motorola.  CE 0982 Symbol Tech INC., N.Y. 11742 Part: MC9090-KU0HJAF6WR (S)S/N: 7064000500869

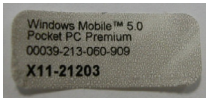
3.8.2 Produktkennzeichnung Mobile Computer MC 9090^{ex} RFID external module

MC 9090^{ex} RFID/LF/HF/UHF external

MC 9090^{ex} RFID/LF/HF/UHF external



A Warning laser	CAUTION - CLASS 3R LASER LIGHT WHEN OPEN. AVOID DIRECT EYE EXPOSURE. ATTENTION - LUMIÈRE LASER DE CLASSE 3R, EN CAS D'OUVERTURE. EXPOSITION DANGEREUSE AU FAISCEAU. VORSICHT - LASERLICHT KLASSE 3R, WENN ABDECKUNG GEÖFFNET. DIREKTE BESTRAHLUNG DER AUGEN VERMEIDEN.				
B Laser compliance and FCC instructions	MC 9090^{ex} RFID/LF/HF/UHF external COMPLIES WITH 21CFR1040.10 AND 1040.11 EXCEPT FOR DEVIATIONS PURSUANT TO LASER NOTICE No 50, DATED JULY 28, 2001, AND IEC 60825-1:1993 + A2:2001, EN60825-1:1994 + A1:1996 + A2:2001. CE 0044 0168				
C Ex protection type	see type label MC 9090^{ex} RFID/LF/HF/UHF external <table border="1"> <tr> <td data-bbox="695 1749 935 1928"> Type B7-A219-... </td><td data-bbox="935 1749 1477 1928"> II 3G Ex nA [nL] IIC T4 II 3D Ex tD A22 IP54 T90°C -20°C ≤ Ta ≤ +50°C B1-A219-7C0005 X </td></tr> <tr> <td data-bbox="695 1928 935 2056"> Type B7-A229-... </td><td data-bbox="935 1928 1477 2056"> Class I Division 2 Groups A, B, C and D Class II Division 2 Groups F and G Class III Division 2 </td></tr> </table>	Type B7-A219-...	II 3G Ex nA [nL] IIC T4 II 3D Ex tD A22 IP54 T90°C -20°C ≤ Ta ≤ +50°C B1-A219-7C0005 X	Type B7-A229-...	Class I Division 2 Groups A, B, C and D Class II Division 2 Groups F and G Class III Division 2
Type B7-A219-...	II 3G Ex nA [nL] IIC T4 II 3D Ex tD A22 IP54 T90°C -20°C ≤ Ta ≤ +50°C B1-A219-7C0005 X				
Type B7-A229-...	Class I Division 2 Groups A, B, C and D Class II Division 2 Groups F and G Class III Division 2				

D Warning laser	MC 9090^{ex} RFID/LF/HF/UHF external  The label contains the following text: LASERLICHT - NICHT IN DIE STRAHLEN EINGEBEN! LASERLUMIERE - NE PAS REGARDER DANS LE FASCEAU LASER - A LASER DE CLASSE 2 CAUTION: LASER LIGHT, DO NOT STARE INTO BEAM CLASS 2 LASER PRODUCT 680480 HV - 1999 PIN: 17-A119-0GJ3HJAF600 II 2 G Ex q [H] IIC T4 PTB 05 ATEX 2055 IECEx PTB 08.0012 SIN: 0431000600124 JULY, 2010 MADE IN MEXICO ASSEMBLED IN GERMANY ONLY USE BATTERY PACK PIN 17-A120-0001 WARNING: THIS ENCLOSURE IS FACTORY SEALED, DO NOT OPEN! DO NOT RECHARGE IN THE HAZ LOC! THIS DEVICE CONTAINS APPROVED RADIO MODULES TYPE: 21-21160 / 802.11 abg (PHOTON) TYPE: 21-54381 / BLUETOOTH MODULE TYPE: MC9090 RFID-UHF BARTEC GmbH 97980 BAD MERGENTHEIM - GERMANY
E Type label	MC 9090^{ex} RFID/LF/HF/UHF external  The label contains the following text: LASERLICHT - NICHT IN DIE STRAHLEN EINGEBEN! LASERLUMIERE - NE PAS REGARDER DANS LE FASCEAU LASER - A LASER DE CLASSE 2 CAUTION: LASER LIGHT, DO NOT STARE INTO BEAM CLASS 2 LASER PRODUCT 680480 HV - 1999 PIN: 17-A119-0GJ3HJAF600 II 2 G Ex q [H] IIC T4 PTB 05 ATEX 2055 IECEx PTB 08.0012 SIN: 0431000600124 JULY, 2010 MADE IN MEXICO ASSEMBLED IN GERMANY ONLY USE BATTERY PACK PIN 17-A120-0001 WARNING: THIS ENCLOSURE IS FACTORY SEALED, DO NOT OPEN! DO NOT RECHARGE IN THE HAZ LOC! THIS DEVICE CONTAINS APPROVED RADIO MODULES TYPE: 21-21160 / 802.11 abg (PHOTON) TYPE: 21-54381 / BLUETOOTH MODULE TYPE: MC9090 RFID-UHF BARTEC GmbH 97980 BAD MERGENTHEIM - GERMANY
F Labels in the battery compartment	Licence sticker for Windows Mobile™ 5.0 Premium operating system  The sticker contains the following text: Windows Mobile™ 5.0 Pocket PC Premium 00039-213-060-909 X11-21203 Label contains details on the Motorola device before it was modified by BARTEC GmbH. - CE mark and notified body used by Motorola - Manufacturer Motorola (formerly Symbol Technologies Incorporation) - Type number (part) - Serial number ((S) S/N) Important: You will need to quote the type number and serial number when making enquiries directly to the Technical Support department at Motorola.  The image shows a CE mark with the number 0982 and the following text: Symbol Tech INC., N.Y. 11742 Part: MC9090-KU0HJAF6WR (S)S/N: 7064000500869

4 Commissioning

4.1 MC 9090^{ex} Manual and Software for Windows Mobile from Motorola

Link:

<http://support.symbol.com/support/product/manuals.do>

Mobile Computers

MC9090 WM

List of the available manuals and software downloads for the standard Motorola versions.

4.2 MC 9090^{ex} RFID Documentation from BARTEC

Use the following link to access the available documentation and downloads.

If you have any further questions, please contact us directly at info@bartec.de.

Left German homepage:

<http://www.bartec.de/>

Link to English homepage:

http://www.bartec.de/index_eng.htm

4.3 MC 9090^{ex} RFID Software

The software has been programmed as a demonstration program to test the devices. The demonstration software has been written into Open Source so that every user with the development tools can view and use the structure.

The DLL files and the demonstration program are available on a password-protected page for download on request.

The password can be inquired from BARTEC at info@bartec.de.

5 Additional Information

5.1 Order numbers MC 9090^{ex} (ATEX Zone 2/22)

	B 7 - A 2 1 9 - R				/	H	C		F	A	6		
Version													
MC 9090 ^{ex} -G Gun													
MC 9090 ^{ex} -K Brick													
Barcode scanning													
none													
SE1524 1D-Long Range Scan Engine (only Gun)													
SE950 1D-Standard Range Scan Engine (only Brick)													
SE4400 1D-/2D-Imager Engine													
RFID													
LF external module													
HF external module													
UHF (US) external module													
UHF (EU) external module													
LF internal module													
UHF (US) external module + external antenna													
UHF (EU) external module + external antenna													
Keyboard													
28 keys, numeric													
33 keys, numeric													
43 keys, alphanumeric													
53 keys, alphanumeric													
53 keys, alphanumeric with layout for VT emulation													
53 keys, alphanumeric with layout for 3270 emulation													
53 keys, alphanumeric with layout for 5250 emulation													
SD cards													
without SD card													
with 512 MB SD card													
with 1 GB SD card													
with 2 GB SD card													

Example: MC 9090^{ex} RFID/HF with 2D-Imager Engine and 53 keys without SD card.

Type B7-A219-RKK2/HCEFA600

5.2 Order numbers MC 9090^{ex} (UL Class I, II, III Division 2)

	B 7 - A 2 2 9 - R / H C F A 6 									
Version										
MC 9090 ^{ex} -G Gun										
MC 9090 ^{ex} -K Brick										
Barcode scanning										
none										
SE1524 1D-Long Range Scan Engine (only Gun)										
SE950 1D-Standard Range Scan Engine (only Brick)										
SE4400 1D-/2D-Imager Engine										
RFID										
LF external module										
HF external module										
UHF (US) external module										
LF internal modules modules (no scan engine)										
UHF (US) external module + external antenna										
Keyboard										
28 keys, numeric										
33 keys, numeric										
43 keys, alphanumeric										
53 keys, alphanumeric										
53 keys, alphanumeric with layout for VT emulation										
53 keys, alphanumeric with layout for 3270 emulation										
53 keys, alphanumeric with layout for 5250 emulation										
SD cards										
without SD card										
with 512 MB SD card										
with 1 GB SD card										
with 2 GB SD card										

G

K

0

J

U

K

1

2

3

4

5

A

L

F

E

G

H

J

0

0

0

1

0

2

0

3

Example: MC 9090^{ex}-G RFID/HF with Long Range Scan Engine, external RFID/UHF module, 53 keys and without SD card.

Type B7-A229-RGJ3/HCEFA600

5.3 Order numbers MC 9090^{ex} (Special variant ATEX Zone 2/22)

	B 7 - A 2 1 9 - R G		0	/	H J		F R 1		
		U				E			
		K				G			
						H			
						J			
Version	MC 9090 ^{ex} -G Gun								
Barcode scanning	SE950 1D-Standard Range Scan Engine (only Brick)								
	SE4400 1D-/2D-Imager Engine								
Keyboard	53 keys, alphanumeric								
	53 keys, alphanumeric with layout for VT emulation								
	53 keys, alphanumeric with layout for 3270 emulation								
	53 keys, alphanumeric with layout for 5250 emulation								
SD cards	without SD card								
	with 512 MB SD card								
	with 1 GB SD card								
	with 2 GB SD card								

Example: MC 9090^{ex}-G RFID/HF with 1D-Standard Range Scan Engine, RFID/UHF module
(R1 from Motorola) and 53 keys without SD card **Type B7-A219-RGU0/HJEFR100**

5.4 Order numbers MC 9090^{ex} (Special variant UL Class I, II, III Division 2)

	B 7 - A 2 2 9 - R G		0	/	H J		F R 7		
		U				E			
		K				G			
						H			
						J			
Version	MC 9090 ^{ex} -G Gun								
Barcode scanning	SE950 1D-Standard Range Scan Engine (only Brick)								
	SE4400 1D-/2D-Imager Engine								
Keyboard	53 keys, alphanumeric								
	53 keys, alphanumeric with layout for VT emulation								
	53 keys, alphanumeric with layout for 3270 emulation								
	53 keys, alphanumeric with layout for 5250 emulation								
SD cards	without SD card								
	with 512 MB SD card								
	with 1 GB SD card								
	with 2 GB SD card								

Example: MC 9090^{ex}-G RFID/HF with 1D-/2D-Imager Engine, RFID/UHF module
(R7 from Motorola), 53 keys and without SD card **Type B7-A229-RGK0/HJEFR700**

Erklärung der Konformität
Declaration of Conformity
Attestation de conformité

N^o B1-A219-7C0001_B

BARTEC

BARTEC GmbH
Max-Eyth-Straße 16
97980 Bad Mergentheim
Germany



Wir

We

Nous

BARTEC GmbH,

erklären in alleiniger Ver-
antwortung, dass das
Produkt

declare under our sole
responsibility that the
product

attestons sous notre seule
responsabilité que le pro-
duit

**Mobile Computer
MC9090^{ex} RFID
Zone 2/22**

**Mobile Computer
MC9090^{ex} RFID
Zone 2/22**

**Mobile Computer
MC9090^{ex} RFID
Zone 2/22**

(MC9090 RFID)

(MC9090 RFID)

(MC9090 RFID)

Typenbezeichnung : B7-A219-R**/H**R1**

auf das sich diese Erklä-
rung bezieht den Anforde-
rungen der folgenden
Richtlinien (RL)
entspricht

to which this declaration
relates is in accordance
with the provision of the
following **directives (D)**

se référant à cette attesta-
tion correspond aux dispo-
sitions des
directives (D) suivantes

**ATEX-Richtlinie
94/9/EG**

**ATEX-Directive
94/9/EC**

**ATEX-Directive
94/9/CE**

**RoHS-Richtlinie
2002/95/EG**

**RoHS-Directive
2002/95/EC**

**RoHS-Directive
2002/95/CE**

und mit folgenden Normen
oder normativen Doku-
menten übereinstimmt

and is in conformity with
the following standards or
other normative docu-
ments

et est conforme aux
normes ou documents
normatifs ci-dessous

**EN 60079-0:2006
EN 60079-15:2005**

**EN 61241-0:2006
EN 61241-1:2004**

EN 60529:1991 + A1:2000

Kennzeichnung

Marking

Marquage

**II 3G Ex nA [nL] IIB T4
II 3D Ex tD A22 IP54 T90 °C
B1-A219-7C0001 X**

**Verfahren der
internen Fertigungs-
kontrolle
B1-A219-7C0001**

**Procedure of
internal control of
Production**

**Procédure de
contrôle interne de
fabrication**

CE

Bad Mergentheim, den 03.03.2010

ppa. Ewald Warmuth
Geschäftsleitung / General Manager

Erklärung der Konformität
Declaration of Conformity
Attestation de conformité

N^o B1-A219-7C0004

BARTEC

BARTEC GmbH
Max-Eyth-Straße 16
97980 Bad Mergentheim
Germany



Wir

BARTEC GmbH,

erklären in alleiniger Ver-
antwortung, dass das
Produkt

**Mobile Computer
MC9090ex RFID
Zone 2/22**

We

declare under our sole
responsibility that the
product

**Mobile Computer
MC9090ex RFID
Zone 2/22**

Nous

attestons sous notre seule
responsabilité que le pro-
duit

**Mobile Computer
MC9090ex RFID
Zone 2/22**

Typenbezeichnung : B1-A219-R*05 / H*****

auf das sich diese Erklä-
rung bezieht den Anforde-
rungen der folgenden
Richtlinien (RL)

entspricht

**ATEX-Richtlinie
94/9/EG
EMV-Richtlinie
2004/108/EG
RoHS-Richtlinie
2002/95/EG
Funk-Richtlinie
1999/5/EG**

und mit folgenden Normen
oder normativen Doku-
menten übereinstimmt

**EN 60079-0:2006
EN 60079-15:2005
EN 61241-0:2006
EN 60529:1991 +A1 :2000**

to which this declaration
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**ATEX-Directive
94/9/EC
EMC-Directive
2004/108/EC
RoHS-Directive
2002/95/EC
Radio equipment-
Directive
1999/5/EC**

and is in conformity with
the following standards or
other normative docu-
ments

**EN 61241-1 :2004
EN 60950-1:2006
EN 301 489-1 1.8.1 :2008**

se référant à cette attesta-
tion correspond aux dispo-
sitions des
directives (D) suivantes

**ATEX-Directive
94/9/CE
CEM-Directive
2004/108/CE.
RoHS-Directive
2002/95/CE
Radio equipment-
Directive
1999/5/CE**

et est conforme aux
normes ou documents
normatifs ci-dessous

**EN 301 489-3 1.4.1 :2008
EN 300 330-1 1.3.1 :2006
EN 301 330-2 1.3.1 :2006**

Kennzeichnung

**II 3G Ex nA [nL] IIC T4
II 3D Ex tD A22 IP54 T90°C
-20°C ≤ Ta ≤ +50°C
B1-A219-7C0004**

**Verfahren der
internen Fertigungs-
kontrolle**

CE

Marking

**Procedure of
internal control of
Production**

Marquage

**Procédure de
contrôle interne de
fabrication**

Bad Mergentheim, den 17.02.2010

ppa. Ewald Warmuth

Geschäftsleitung / General Manager

Erklärung der Konformität
Declaration of Conformity
Attestation de conformité

N^o **B1-A219-7C0005**

BARTEC

BARTEC GmbH
Max-Eyth-Straße 16
97980 Bad Mergentheim
Germany



Wir

We

Nous

BARTEC GmbH,

erklären in alleiniger Ver-
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duit

**Mobile Computer
MC9090ex RFID
Zone 2/22**

**Mobile Computer
MC9090ex RFID
Zone 2/22**

**Mobile Computer
MC9090ex RFID
Zone 2/22**

Typenbezeichnung : B1-A219-R*0* / H*****

auf das sich diese Erklä-
rung bezieht den Anforde-
rungen der folgenden
Richtlinien (RL)
entspricht

to which this declaration
relates is in accordance
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following **directives (D)**

se référant à cette attesta-
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RoHS-Richtlinie
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Funk-Richtlinie
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94/9/EC
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RoHS-Directive
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1999/5/EC**

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94/9/CE
CEM-Directive
2004/108/CE.
RoHS-Directive
2002/95/CE
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EN 61241-1 :2004
EN 60950-1:2006
EN 301 489-1 1.8.1 :2008

EN 301 489-3 1.4.1 :2008
EN 300 330-1 1.3.1 :2006
EN 301 330-2 1.3.1 :2006

Kennzeichnung

Marking

Marquage

⊕ II 3G Ex nA [nL] IIC T4
⊕ II 3D Ex tD A22 IP54 T90°C
-20°C = Ta = +50°C
B1-A219-7C0005

**Verfahren der
internen Fertigungs-
kontrolle**

**Procedure of
internal control of
Production**

**Procédure de
contrôle interne de
fabrication**

CE

Bad Mergentheim, den 24.06.2010

ppa. Ewald Warmuth

Geschäftsleitung / General Manager

