iDTRONIC

PROFESSIONAL RFID

UHF Industrial Reader
BLUEBOX CX MR IA

APPLICATIONS

- Machine Authentification
- Automotive Production
- Logistics Applications
- Data Collection (IoT)
- Robotics

FEATURES

- Integrated Antenna
- Antenna Auto-Tuning
- USB Service Interface
- M12 or RJ45 Connectors
- RS232/RS485, Ethernet, Wiegand or CANbus
- IP67 Protection Class
- Supports ETSI & FCC
- Real Time Clock (optional)
- SDK incl. upgradeable FW

RFID FREQUENCY

- **UHF** (EPC C1 GEN2 | ISO 18000-63)

PRODUCT DESCRIPTION

The BLUEBOX CX MR IA is an industrial read and write device for the latest industry 4.0 and IoT applications in automation and logistics processes. Its RFID UHF controller and integrated antenna operates in global frequency areas from 840 – 960 MHz.

Thanks to its IP67 protection class, the BLUEBOX reader is resistant to rough and demanding environments in the industrial sector.

Data capturing and collection made easy with the various integrated industrial interface options. Real-Time transfer of ongoing processes can be done via the CANbus port. The RS232/485 interface option is especially developed for the direct control of machines. Wiegand is an port for the identification of access control data.

The integration to all common machines or devices is possible with the BLUEBOX CX MR IA industrial reader. The optionally available M12 or RJ45 (Ethernet) connector are suitable for latest industry 4.0 standards.

Through these communication channels, it is also possible to configure the functional parameters and to upgrade the firmware. We offer a software development kit especially for our BLUEBOX series. The 'BLUEBOX Show' software of the SDK is foreseen to explicate these operations. Additionally we show the functions of the demo software in our demo software introduction on YouTube.

TECHNICAL DATA

ELECTRICAL SPECIFICATIONS

Power Supply	10 ... 36 Vdc, PoE (RJ45 Version)
Power Rating	15 W @27 dBm
Operating Frequency	840 – 960 MHz, software programmable
Max. Power	max 500 mW (27 dBm) software programmable in 1 dB steps
Operating Distance	up to 3 meters*
Antenna	integrated
Digitial Inputs	2 optoisolated inputs, 10 – 36 Vdc, max 20 mA @24 Vdc
Digital Outputs	2 relay outputs, 1A@30 Vdc, 0.5 A@125 Vac
Status	3 LED Buzzer
Interfaces	RS232	RS485 Ethernet 10 – 100 M Wiegand CANbus (SAE J1939 or CANopen)
Service Interface	USB VirtualComPort (VCP)
Connectors	M12 Amphenol RJ45

MECHANICAL SPECIFICATIONS

Dimensions	110 × 140 × 62 mm
Material	Die-cast aluminum plastic
IP Protection	IP67

*Reading distance depends on tag, antenna and environmental conditions.

ENVIRONMENTAL CONDITIONS

Operating Temperature	-20 °C to +55 °C
Storage Temperature	-40 °C to + 85 °C
Humidity	up to 95%, non condensing

SUPPORTED STANDARDS | TAGS

Standard ISO 18000-6C, EPC Class 1 Generation 2

APPLICABLE STANDARDS

EMC	EN 301 489-3
Radio Regulation	EN 302 208-2
Safety	CEI EN 60950-1 CEI EN 50364

SDK INFORMATION

Supported OS	Windows 7, 8
Supported Languages	C#, C++, serial command protocol

CONNECTOR TYPES

ETHERNET CONNECTION WITH M12 D-CODED

ETHERNET CONNECTION WITH AMPHENOL RJ45

MECHANICAL VIEW

140

62

122

82

110

⌀ 6 (M5 screw)

All Dimensions in millimeters (mm)
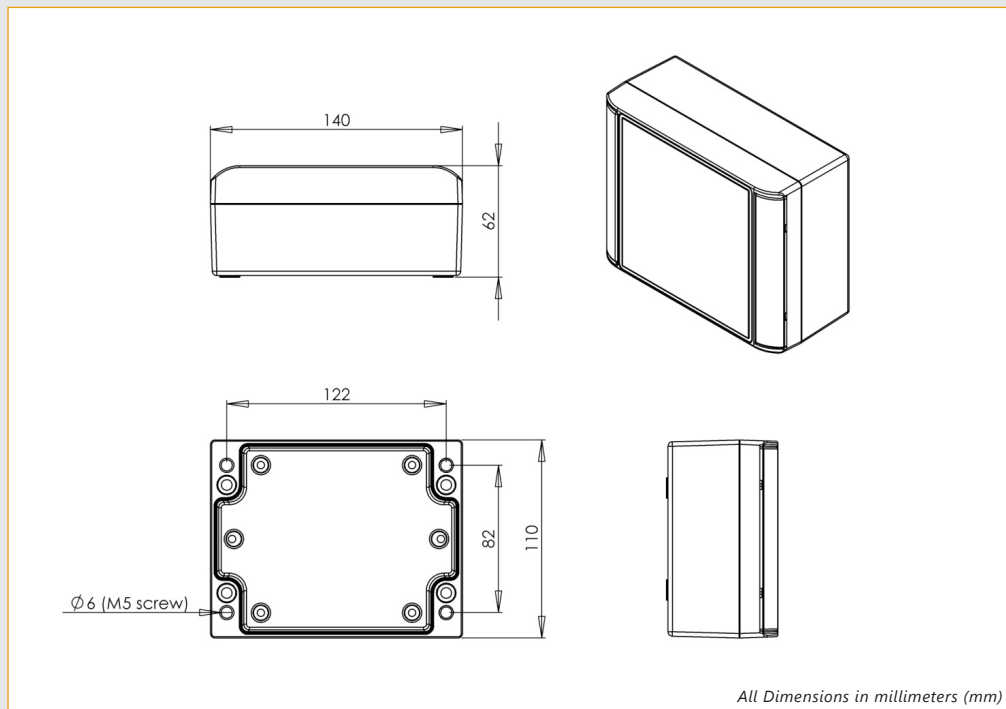
ORDER CODES

VERSIONS	ORDER CODES
RJ45 Ethernet + RS232/485	R-IN-UHF-5325U
RJ45 Ethernet + RS232/485 + Real Time Clock	R-IN-UHF-5325U-RTC
M12 Ethernet + RS232/485	R-IN-UHF-5326U
M12 Ethernet + RS232/485 + Real Time Clock	R-IN-UHF-5326U-RTC
M12 Wiegand	R-IN-UHF-5327U
M12 CANbus (SAE J1939 or CANopen) + Ethernet	R-IN-UHF-5328U

For further information & prices, please contact info@idtronic-rfid.com