



# UHF Industrial Reader

## BLUEBOX CX LR 1CH

### APPLICATIONS

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

### FEATURES

- External Antenna (TNC-female)
- 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 LR 1CH 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 operates in global frequency areas from 840 – 960 MHz. The reader is equipped with one external antenna ports for TNC-female antennas. We offer a wide range of compatible antennas within our product portfolio.

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 LR 1CH 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 @30 dBm
Operating Frequency	840 – 960 MHz, software programmable
Max. Power	max 1 W (30 dBm) software programmable in 1 dB steps
Operating Distance	up to 8 meters*
Antenna	One external (50 Ω) TNC-female
Digital 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

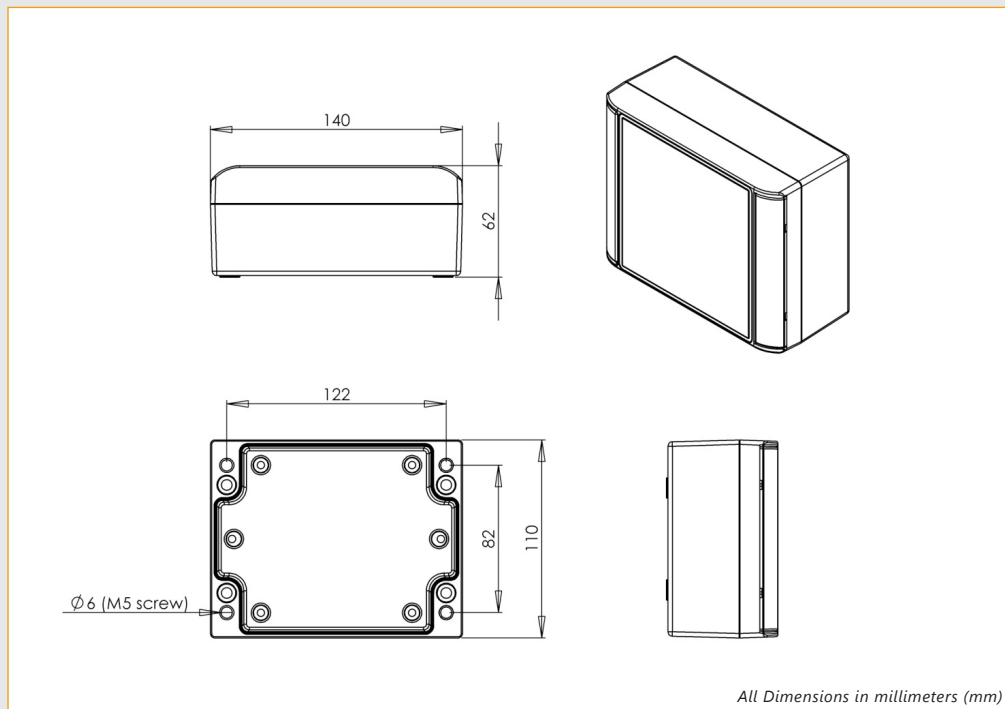


ETHERNET CONNECTION WITH M12 D-CODED



ETHERNET CONNECTION WITH AMPHENOL RJ45

## MECHANICAL VIEW



## ORDER CODES

VERSIONS	ORDER CODES
<b>RJ45</b> Ethernet + RS232/485	R-IN-UHF-5335U
<b>RJ45</b> Ethernet + RS232/485 + Real Time Clock	R-IN-UHF-5335U-RTC
<b>M12</b> Ethernet + RS232/485	R-IN-UHF-5336U
<b>M12</b> Ethernet + RS232/485 + Real Time Clock	R-IN-UHF-5336U-RTC
<b>M12</b> Wiegand	R-IN-UHF-5337U
<b>M12</b> CANbus (SAE J1939 or CANopen) + Ethernet	R-IN-UHF-5338U

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