iDTRONIC

RFID READER UHF

LONG RANGE READER BLUEBOX

PRODUCT DESCRIPTION

The UHF Long Range Reader BLUEBOX is an industrial read and write device for the latest industry 4.0 and IoT applications in auto-mation and logistics processes. Its RFID UHF controller operates in global frequency areas from 840 – 960 MHz. The reader is equipped with two 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 UHF Long Range Reader BLUEBOX 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 UHF Long Range Reader BLUEBOX industrial device. The optio nally available M12 or RJ45 (Ethernet) connector are suitable for la test industry 4.0 standards.

Through these communication channels, it is also possible to con-figure 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.

APPLICATIONS

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

FEATURES

· **2 External Antennas (TNC-female)**
· **Antenna Auto-Tuning**
· **USB Service Interface**
· **M12 or RJ45 Connectors**
· **RS232/RS485, Ethernet, Wiegand or CANbus**
· **IP67 Protection Class**

RFID OPTIONS

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

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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
Status	3 LED Buzzer
Antenna	Two-external (50 Ω) TNC-female
Operating Distance	up to 8 meters*
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
Interfaces	RS232 | RS485 Ethernet 10 – 100 M Wiegand CANbus (SAE J1939 or CANopen)
Service Interface	USB VirtualComPort (VCP)
Connector	M12 Amphenol RJ45

MECHANICAL CONDITIONS

Housing Material	Die-cast aluminum plastic
Overall Dimensions	110 x 140 x 62mm
Protection Class	IP67

ENVIRONMENTAL CONDITIONS

Operating Temperature	-20°C up to +55°C
Storage Temperature	-40°C up 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

SUPPORTED STANDARDS / TAGS

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

Reading distance depends on tag, antenna and environmental conditions

ORDER CODES

ORDER CODES	RJ45	M12
RS232 / 485	R-IN-UHF-5345U	R-IN-UHF-5346U
RS232 / 485 + Real Time Clock	R-IN-UHF-5345U-RTC	R-IN-UHF-5346U-RTC
Wiegand	-	R-IN-UHF-5347U
CANbus (SAE J1939 or CANopen) + Ethernet	-	R-IN-UHF-5348U