iDTRONIC

UHF Mid Range Reader / Antenna
BLUEBOX

PRODUCT DESCRIPTION

UHF Mid Range Reader /Antenna BLUEBOX with integrated antenna delivers the best performance and quality necessary for robust RFID-based applications.

Designed for industrial and outdoor environmets, it is driven by iDTRONIC's powerfull UHF Embedded RFID module and equipped with an Ethernet and RS232 / RS485 interface for a flexible and low cost installation. An optional Wiegand interface is available as well.

The industrial designed device with its IP65 protection provides up to 27dBm power output which can be regulated through software commands, and achieves up to 8 meters / 26 feet reading distance. UHF Mid Range Reader /Antenna BLUEBOX is available for ETSI & FCC frequencies and supports the well known BLUEBOX SDK which includes a demo tool for Windows XP, 7 or 8.

Additionally it comes along with programming information for C#, C++ and a seriel command protocol.

APPLICATIONS

· **Parking**
· **Waste Management**
· **Forklift**
· **Logistics**

FEATURES

· **Integrated Antenna**
· **Antenna Auto-Tuning**
· **Upgradeable FW**
· **Power over Ethernet (PoE)**
· **M12 Connectors**
· **Up to 8 Meters Read Range**
· **RS232 / RS485, Ethernet, Wiegand or Canbus (J1939)**

RFID OPTIONS

· **UHF (EPC C1 GEN2 / ISO18000-6C)**

TECHNICAL DATA

ELECTRICAL SPECIFICATIONS

Power Supply	10 … 36 Vdc, PoE
Power Rating	15W @27dBm
Operating Frequency	840 – 960 MHz
Max. Power	max 0.5 W (27dBm) Software programmable in 1dB steps
Operating Distance	up to 8 meters / 26 feet
Antenna	integrated
Digital Inputs	2 optoisolated inputs, 10 - 36 Vdc, max 20 mA @ Vdc
Digital Outputs	2 relay outputs, 1 A@ 30 Vdc, 05 A@ 125 Vac
Status	1 LED Buzzer
Interfaces	RS232 / RS485 Ethernet 10 - 100M Wiegand Canbus (J1939)
Service Interface	USB VirtualCom
Interfaces	M12 Connectors

MECHANICAL CONDITIONS

Dimensions	190 x 190 x 80mm
Material	Die-cast aluminum, plastic
Class Protection	IP65
Housing Color	RAL 7045

ENVIRONMENTAL CONDITIONS

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

ANTENNA SPECIFICATIONS

Gain	7.5 dBic (min)
VSWR	1.3:1 (typ) 1.5:1 (max)
3dB Beamwidth Azimuth Elevation	67° (typ) 73° (typ)
Polarization	RHCP
Axial Ratio at Boresight	2dB (typ) 2.5 dB (max)
Axial Ratio @ ± 30º	3 dB (max)
R/ B Ratio	-16 dB (typ)

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	Window 7, 8
Supported Languages	C#, C++, Serial command protocol

Reading distance depends on tag, antenna and environmental conditions

ORDER CODES

ORDER CODES	ETSI	CANBUS	FCC
Basic Version	R-IN-UHF-5426U-G	-	R-IN-UHF-5426U-G-FCC
Real Time Clock	R-IN-UHF-5426U-RTC-G	-	R-IN-UHF-5426U-RTC-G-FCC
Wiegand Interface	R-IN-UHF-5427U-G	-	R-IN-UHF-5427U-G-FCC
(J1939)	-	R-IN-UHF-5428U-G	-