# **BLUEBOX HF – Basic Controller** with Integrated Antenna



iDTRONIC's BLUEBOX Controller & Antenna family is well suited for industrial and enterprise applications, where reliable, robust and well performing products are needed. All components are designed as a powerful combination for an easy and cost efficient system installation.

The BLUEBOX HF — Basic Controller with integrated antenna can achieve a reading distance of up to 15 cm. The combination of a modern RF module with the up-to-date BLUEBOX SDK enables an easy start for ambitious developers.

## **Applications:**

- Industrial Automation
- Supply Chain
- Laundry Management
- Access Control



#### **Features**

- 13.56 MHz
- Supports ISO14443A, ISO15693 & ISO18000-3
- Integrated antenna
- Possibility of using different RFID standards parallel in one application
- Several Standard Read Modes like Scan Mode, Notification Mode
- Integrated I/O ports
- 4 LEDs for status information
- Ruggedized product design and enclosures
- Unique SDK for all BLUEBOX products
- BLUEBOX SHOW applications software
- CE approved

## **Technical Data**

**Mechanical Specifications** 

Housing-Material: PC

Dimensions:  $110 \times 140 \times 60 \text{ mm}$ 

Weight: 430 g Protection Class: IP65

**Electrical Specifications** 

Power Supply:  $24 \text{ VDC} \pm 10 \%$ 

Power Consumption: 3 W

Operating Frequencies: 13.56 MHz
Operating Distance: Up to 15 cm

Connectors: PG9

Antenna Connector: Internal Antenna
Digital I/O: 2 (opto-isolated)
Interface: RS232 + RS485

**Environmental Conditions** 

Operating Temperature: -20 °C to +55 °C

Humidity: 5 % to 95 %

**Features** 

Supported Transponders: ISO14443A, ISO15693,

ISO18000-3, NXP Mifare

family

Working Modes: Scan Mode,

**Notification Mode** 

Status Display: 4 LEDs

**Applicable Standards** 

Radio Regulation: CE

Order Code 5121H

# **BLUEBOX optional Accessories**

Mounting and connection kits are available for all BLUEBOX Controllers and Antennas, which guarantee easy installation.

Office Power Supply (for office usage) - 110-240V to 24V / 12W (with 2 meter Cable & M12 Connector) Office Power Supply (for office usage) - 110-240V to 24V / 20W (with 2 meter Cable & M12 Connector) Industrial Power Supply (for control cabinet) - 110-240V to 24V / 15W (without cable) Industrial Power Supply (for control cabinet) - 110-240V to 24V / 15W (without cable) IP65 Industrial Power Supply (for outdoor usage) - 110-240V to 24V / 50W (with PG9 cable glands & without cable) Interface Cables Version Ethernet interface cable 3 meter with M12 & RJ45 connector USB interface cable 1 meter with M12 Mini USB & USB A connector RS232 interface cable 3 meter with M12 & Sub-D9 connector RS232 / RS485 interface cable 3 meter with M12 connector & open ends	0951A 0952A 0953A 0954A
Office Power Supply (for office usage) - 110-240V to 24V / 20W (with 2 meter Cable & M12 Connector) Industrial Power Supply (for control cabinet) - 110-240V to 24V / 15W (without cable) Industrial Power Supply (for control cabinet) - 110-240V to 24V / 15W (without cable) Industrial Power Supply (for outdoor usage) - 110-240V to 24V / 50W (with PG9 cable glands & without cable) Interface Cables Version Interface cable 3 meter with M12 & RJ45 connector ISB interface cable 1 meter with M12 Mini USB & USB A connector ISB interface cable 3 meter with M12 & Sub-D9 connector	0953A
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P65 Industrial Power Supply (for outdoor usage) - 110-240V to 24V / 50W (with PG9 cable glands & without cable)  Interface Cables  Version  Ithernet interface cable 3 meter with M12 & RJ45 connector  ISB interface cable 1 meter with M12 Mini USB & USB A connector  ISS 232 interface cable 3 meter with M12 & Sub-D9 connector	0954A
Interface Cables Version Ethernet interface cable 3 meter with M12 & RJ45 connector USB interface cable 1 meter with M12 Mini USB & USB A connector RS232 interface cable 3 meter with M12 & Sub-D9 connector	
Version  Ethernet interface cable 3 meter with M12 & RJ45 connector  JSB interface cable 1 meter with M12 Mini USB & USB A connector  RS232 interface cable 3 meter with M12 & Sub-D9 connector	0954A
Ethernet interface cable 3 meter with M12 & RJ45 connector USB interface cable 1 meter with M12 Mini USB & USB A connector RS232 interface cable 3 meter with M12 & Sub-D9 connector	
JSB interface cable 1 meter with M12 Mini USB & USB A connector RS232 interface cable 3 meter with M12 & Sub-D9 connector	Order Coder
SS232 interface cable 3 meter with M12 & Sub-D9 connector	0902A
	0909A
2S232 / RS485 interface cable 3 meter with M12 connector & onen ends	0903A
10202 / 110-100 interlace capie o meter with witz connector a open chas	0904A
Profibus interface cable 3 meter with M12 connectors	0908A
Antenna Cables	
Version Version	Order Coder
Antenna cable 3 meter RG58/U & Ω50 with TNC-TNC connector	9903U
untenna cable 3 meter RG58/U & Ω50 with TNC-TNC connector	9904U
Antenna adapter Ω50 TNC (Male) - SMA (Female)	0906U
Antenna adapter Ω50 TNC - TNC	0951U
Antenna terminator Ω50	0952U
/arious Cables	
/ersion	Order Coder
Power Supply cable 3 meter with M12 connector & open ends	0901A
O cable 3 meter with M12 connector & open ends	0905A
M12 Connectors	
/ersion	Order Coder
Profibus M12 Y - connector	0907A
Profibus M12 T - connector	0956A
Profibus M12 terminator	0906A
Power Supply M12 connector	0910A
O M12 connector	0911A
Profibus M12 connector	0912A
Ethernet M12 connector	0913A
RS232 / RS485 M12 connector	0914A
Antenna Mountain Kits Version	Order Coder
Antenna Mounting Kit for antenna 9124U, 9125U, 9126U & 9127U	9921U
Antenna Mounting Kit for antenna 9128U & 9129U Antenna Mounting Kit for antenna 9130U & 9131U	9922U 9923U

The accessories are optional and not included by delivery