

USB Encoder
Basic Controller with Integrated Antenna
Basic Controller with 1 Antenna Port
Basic Controller Long-Range with 4 Antenna Ports
Controller Mid-Range with Integrated Antenna
Controller Mid-Range with 1 Antenna Port
Controller Mid-Range with 4 Antenna Ports
Controller Long-Range with 4 Antenna Ports

Supported Transponders

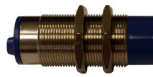
ISO18000-6B	-	-	-	-	Option	Option	Option	Option
ISO18000-6C, EPC Class 1 Gen 2	☑	☑	☑	☑	☑	☑	☑	☑
Supported Frequency	865–867 MHz (ETSI) & 902–928 MHz (FCC)	865–867 MHz (ETSI) & 902–928 MHz (FCC)	865–867 MHz (ETSI) & 902–928 MHz (FCC)	865–960 MHz (Global)	865–960 MHz (Global)	865–960 MHz (Global)	865–960 MHz (Global)	865–960 MHz (Global)

Specifications

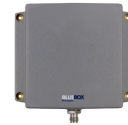
Dimensions	90 × 160 × 30 mm	110 × 140 × 60 mm	110 × 140 × 60 mm	110 × 140 × 60 mm	110 × 140 × 60 mm	110 × 140 × 60 mm	110 × 140 × 60 mm	110 × 140 × 60 mm
Housing Material	PC	PC	PC	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
Antenna	Internal	Internal	External (1 × TNC)	External (4 × SMA)	Internal	External (1 × TNC)	External (4 × TNC)	External (4 × TNC)
Temperature Range	-20 ... +55 °C	-20 ... +55 °C	-20 ... +55 °C	-20 ... +55 °C	-20 ... +55 °C	-20 ... +55 °C	-20 ... +55 °C	-20 ... +55 °C
Voltage Supply	USB	24 Vdc ±10%	24 Vdc ±10%	10–27 Vdc	24 Vdc ±10%	24 Vdc ±10%	24 Vdc ±10%	24 Vdc ±10%
Digital I/O (opto-isolated)	-	2	2	2	2	2	2	2
LEDs	4	4	4	8/12	8/12	8/12	8/12	8/12
Connectors	USB	PG9	PG9	Push-wire terminals	M12	M12/TNC	M12/TNC	M12/TNC
Reading/Writing Distance	Up to 15 cm	Up to 50 cm	Up to 1 m	Up to 10 m	Up to 3 m	Up to 4 m	Up to 6 m	Up to 12 m
Transmit Power	+20 dBm	+20 dBm	+20 dBm	+32 dBm	+27 dBm	+27 dBm	+30 dBm	+32 dBm
Dense Reader Mode	-	-	-	☑	☑	☑	☑	☑
Temperature Sensor/Real-Time Clock	-	-	-	-	☑ ☑	☑ ☑	☑ ☑	☑ ☑
Memory Extension	-	-	-	-	Micro SD-Slot	Micro SD-Slot	Micro SD-Slot	Micro SD-Slot
Stand-alone Mode	-	-	-	-	☑	☑	☑	☑
Service Interface	-	-	-	-	USB	USB	USB	USB
Integrated Webserver	-	-	-	-	☑	☑	☑	☑
RSSI Info	-	-	-	-	☑	☑	☑	☑
Working Modes	Scan Mode	Scan Mode, Notification Mode	Scan Mode, Notification Mode	Scan Mode, Notification Mode	Scan Mode, Notification Mode, Buffered Read Mode	Scan Mode, Notification Mode, Buffered Read Mode	Scan Mode, Notification Mode, Buffered Read Mode	Scan Mode, Notification Mode, Buffered Read Mode
Interface Options	USB	RS232/RS485	RS232/RS485	RS232/RS485, Ethernet	RS232/RS485, Ethernet, Profibus, Profinet, Ethernet/IP, WLAN, GPRS	RS232/RS485, Ethernet, Profibus, Profinet, Ethernet/IP, WLAN, GPRS	RS232/RS485, Ethernet, Profibus, Profinet, Ethernet/IP, WLAN, GPRS	RS232/RS485, Ethernet, Profibus, Profinet, Ethernet/IP, WLAN, GPRS

Order Codes (ETSI/FCC)

RS232/RS485	3122U (USB)	5121U	5131U	5131U	5221U	5237U	5241U	5231U
Ethernet	-	-	-	5132U	5222U	5238U	5242U	5232U
Profibus	-	-	-	-	5223U	5239U	5243U	5233U

Cylindrical
 Antenna

 Near-Field
 Antenna

 Low-Range
 Antenna

 Mid-Range
 Antenna

 Long-Range
 Antenna

 Long-Range
 High-Gain Antenna

 Basic Antenna
 Circular

 Basic Antenna
 Linear


Supported Transponders

Supported Frequency	865–867 MHz (ETSI) & 902–928MHz (FCC)	865–867 MHz (ETSI) & 902–928MHz (FCC)	865–960 MHz (Global)	865–867 MHz (ETSI) & 902–928MHz (FCC)	865–867 MHz (ETSI) & 902–928MHz (FCC)	865–867 MHz (ETSI) & 902–928MHz (FCC)	865–960 MHz (Global)	865–960 MHz (Global)
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Specifications

Dimensions	M30 × 78 mm	90 × 63 × 31 mm	90 × 63 × 31 mm	154 × 126 × 36 mm	270 × 270 × 45 mm	555 × 262 × 59 mm	245 × 235 × 40 mm	245 × 235 × 40 mm
Housing Material	Stainless steel, PC	PC	PC	PC	PC + Aluminum	Stainless Steel + PC	PC + Aluminum coated	PC + Aluminum coated
Protection Class	-	IP67	IP67	IP67	IP65	IP65	IP65	IP65
Temperature Range	-20 ... +55°C	-20 ... +55°C	-20 ... +55°C	-20 ... +55°C	-20 ... +55°C	-20 ... +55°C	-20 ... +55°C	-20 ... +55°C
Antenna Connector	TNC (female)	TNC (female)	TNC (female)	TNC (female)	TNC (female)	TNC (female)	TNC (female)	TNC (female)
Reading/Writing Distance	< 30 cm	< 7 cm (with NF tag)	< 8 cm	Up to 2m	Up to 12m	Up to 10m	Up to 6 m	Up to 6 m
EIFF	-	> 20 dB	> 15 dB					
Antenna Gain	-	< -15 dBi	< -30 dBi	4 dBic	8.5 dBic	11 dBic	7 dBic	8 dBic
Beamwidth	-	-	-	100°/100°	69°/69°	30°/70°	67°/69°	74°
Axial Ratio	-	-	-	2 dB	1 dB	1 dB		
Polarization	-	-	-	circular	circular	circular	circular	linear

Order Codes (ETSI/FCC)

ETSI Frequency	9132U	9121U	9123U	9124U	9126U	9128U	R-LR-UHF-A1	R-LR-UHF-A2
FCC Frequency	9133U	9122U	"	9125U	9127U	9129U	"	"

Remarks:

All BLUEBOX controllers are IP65 protected.
 All BLUEBOX UHF products are CE & FCC certified.

iDTRONIC provides a 3-year warranty for all BLUEBOX products.
 Delivery of controllers includes complete SDK.