

# CX ANTENNA LR



#### PRODUCT DESCRIPTION

Optimized for industrial and outdoor workplaces, the circularly polarised BLUEBOX UHF CX Antenna LR is a powerful, hard-wearing UHF device with a compact 250 mm square footprint.

Just 14 mm thick, this ultra-low profile UHF antenna offers a solution for a variety of applications. It perfectly complements on of our BLUEBOX RFID readers and writers for a reliable and constant implementation of RFID technologies.

Rated IP67 for permanent outdoor and indoor use and built to iDTRONIC's high standard for quality and robustness, the CX Antenna LR creates a new benchmark for multi-purpose industrial grade RFID antennas.

#### TECHNICAL DATA

ELECTRICAL SPECIFICATIONS	
Frequency Range	864 – 869 MHz (EU) 902 – 928 MHz (US)
Polarization	RHCP (Right Hand Circular Polarized)
Antenna Gain	8 dBic
Beamwidth	68° in both planes
Typical VSWR	1.3
Front to back Ratio	20 dB
Axial Ratio	2 dB typical; 4 dB Max
Nominal Impedance	50 Ω
Anti-static Protection	Yes
Max. Input Power	6 W

MECHANICAL SPECIFICATIONS		
Dimensions	250 × 250 × 14 mm	
Weight	0.75 kg	
Radome Material	UV-Resistant ABS	
Protection Class	IP67	
Operating Temperature Storage Temperature	-20° to +55 °C -30° to +65 °C	
Mounting	Flush or VESA Mount	
Connector type / Position	SMA female side connector	

## **ORDER CODES**

VERSIONS	ORDER CODES
CX Antenna LR - ETSI (865 – 867 MHz)	R-IN-UHF-9135U
CX Antenna LR - FCC (902 – 928 MHz)	R-IN-UHF-9136U



# **MR ANTENNA**



#### PRODUCT DESCRIPTION

iDTRONIC's Mid-Range BLUEBOX Antenna UHF is a high-performance device which can be used in combination with our BLUEBOX UHF Controllers.

It enables the UHF BLUEBOX Mid-Range reading of up to 2 meters. Through its circular polarized setting, the user will be able to read out the tags in multiple 3D orientations.

Thanks to its specification, small dimensions and robust housing, this UHF Mid-Range Antenna can be used for Forklift or Access Control applications.

#### **TECHNICAL DATA**

ELECTRICAL SPECIFICATIONS	
Frequency Range	864 – 869 MHz (EU) 902 – 928 MHz (US)
Polarization	RHCP (Right Hand Circular Polarized)
Antenna Gain	5.5 dBiC typical
Beamwidth	115° in both planes
Typical VSWR	1.4
Front to back Ratio	-10 dB
Axial Ratio	2 dB typical
Nominal Impedance	50 Ω
Anti-static Protection	DC Grounded
Max. Input Power	3 W

MECHANICAL SPECIFICATIONS	
Dimensions	150 × 150 × 14 mm
Weight	0.25 kg
Radome Material	UV-Resistant ABS
Protection Class	IP68
Operating Temperature Storage Temperature	-40° to +65 °C -40° to +65 °C
Mounting	Flush or VESA Mount
Connector type / Position	SMA female side connector

## **ORDER CODE**

VERSION	ORDER CODE
MR Antenna	R-T7-A5020



# CYLINDRICAL ANTENNA M30

### PRODUCT DESCRIPTION

The BLUEBOX M30 UHF Antenna is a fixed and compact UHF RFID antenna for industrial automation processes.



In combination with RFID readers the M30 UHF Cylindrical Antenna can achieve reading distances of up to 20 centimeters within industrial environments.

Typically this device will be used within the industrial automation at production lines. Another wide spread applications are the data collection and access control.

The device comes with a TNC FEMALE antenna connector. This RFID component allows a flexible and fast integration into many existing applications with its easy to install cylindrical M30 housing.

### **TECHNICAL DATA**

ELECTRICAL SPECIFICATIONS	
Frequency Range	864 – 869 MHz (EU) 902 – 928 MHz (US)
Polarization	RHCP (Right Hand Circular Polarized)
Antenna Gain	-10 dBiC typical
Typical VSWR	2.0 : 1 max
Front to back Ratio	1 dB max
Axial Ratio	3 dB max
Nominal Impedance	50 Ω

MECHANICAL SPECIFICATIONS	
Dimensions	M30 × 1.5 × 90.15 mm M30 × 1.5 × 52 mm (90° Version)
Weight	0.2 kg
Radome Material	Nickelled Brass + PC
Protection Class	IP65
Connector type	TNC female

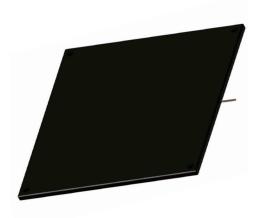
### **ORDER CODES**

VERSIONS	ORDER CODES	
ETSI (864 – 870 MHz)		
M30 9131U (ETSI) - Size: 90.15 mm	R-IN-UHF-9131U	
M30 9132U (ETSI) - Size: 52 mm	R-IN-UHF-9132U	
FCC (913.5 – 919.5 MHz)		
M30 9133U (FCC) - Size: 90.15 mm	R-IN-UHF-9133U	
M30 9134U (FCC) - Size: 52 mm	R-IN-UHF-9134U	

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# SHELF ANTENNA



#### PRODUCT DESCRIPTION

Part of our SlimLine range of antennas, the shelf antenna with its innovative 'Array-Ability' design offers a highly scalable and customised antenna solution for a wide range of RFID deployments.

At just 8.5 mm thick, the shelf antenna combines ultra-low profile and intelligent scalable design, with the performance of a circular polarised UHF antenna.

With a highly durable Kydex radome and flexible easy mounting options, including the use of innovative 'Array-Ability' feet, the shelf antenna is ideal for existing shelving systems, providing real-time asset & inventory management – quite simply the smartest antenna on the shelf.

#### **TECHNICAL DATA**

ELECTRICAL SPECIFICATIONS	
Frequency Range	864 – 869 MHz (EU) 902 – 928 MHz (US)
Polarization	RHCP (Right Hand Circular Polarized)
Antenna Gain	5 dBic (ETSI) / 6 dBic (FCC)
Beamwidth	65° in vertical, 65° in horizontal
Typical VSWR	< 1.4:1
Front to back Ratio	22 dB (ETSI) / 17 dB (FCC)
Axial Ratio	2 db (ETSI) / 3 dB; max: 4 dB (FCC)
Nominal Impedance	50 Ω
Anti-static Protection	Yes
Max. Input Power	6 W

MECHANICAL SPECIFICATIONS	
Dimensions	300 × 300 × 8.5 mm
Weight	0.75 kg
Radome Material	Fire ratardant Kydex
Protection Class	IP54
Mounting	Integrated mounting guides
Connector type	SMA female side fly lead (400 mm / 15 <sup>3</sup> / <sub>4</sub> in.) Custom lenghts available for array options

#### **ORDER CODES**

VERSIONS	ORDER CODES
ETSI (865 – 867 MHz)	R-T7-A7030C-ETSI
FCC (902 – 928 MHz)	R-T7-A7030C-FCC



# **DOOR FRAME ANTENNA**



### PRODUCT DESCRIPTION

The iDTRONIC UHF Door Frame Antenna is a unique, ultra-low profile linear flat panel UHF antenna. The durable door frame antenna easily transforms exisiting doorways into an RFID portal or read point.

At just 8 mm in thickness and with integrated mounting holes requiring no extra frames and mounting kits for installation, the door frame antenna is a portal antenna solution with absolutely no compromise on spatial dimensions.

Versatile and good-looking, the door frame antenna works as a left, right and/ or top antenna. When combined with a ground antenna,, the door frame antenna makes a high performance, cost effective RFID portal a reality.

#### **TECHNICAL DATA**

ELECTRICAL SPECIFICATIONS		
Frequency Range	864 – 869 MHz (EU) 902 – 928 MHz (US)	
Polarization	Linear	
Antenna Gain	5 dBic	
Beamwidth	110° XZ (h), 30° in YZ (v)	
Typical VSWR	< 1.8:1	
Front to back Ratio	7 dB	
Nominal Impedance	50 Ω	
Anti-static Protection	Yes	
Max. Input Power	6 W	

MECHANICAL SPECIFICATIONS	
Dimensions	650 × 86 × 8 mm
Weight	0.5 kg
Radome Material	Fire ratardant Kydex
Protection Class	IP54
Operating Temperature	-20 °C to +55 °C
Connector type	SMA female side fly lead (300 mm) 2 m SMA to RPTNC (included)

#### **ORDER CODE**

VERSION	ORDER CODE
Door Frame Antenna	R-T7-A8060