# **BARTEC**



Ex Certified Wireless LAN Antenna Datasheet



The Xbeam EX is an ATEX approved rf antenna for creating wireless networks and wireless telemetry systems in hazardous area. The antenna is optimized for use in steel and concreet structure environments where multipath effects and reflections are present.

The Xbeam EX is a prefered solution where the access point can be placed in safe zone or safe area and where cable length does not exceed 30 meters. For cable streches above 30 meters, or for lossless coverage we recommend our EX-AP-A or Xpoint series of access points.

The antenna must be mounted on the belonging bracket and the bracket has to be connected to earth. The antenna is constructed with permanently connected unterminated cable that must be properly protected and the connection must be carried out in an appropriate certified Ex-e or Ex-d enclosure or in safe area. Additional clamping of cable shall be installed to ensure that pulling and twisting is not transmitted to the terminations inside the antenna.

The antenna can be utilized in:

- WLAN
- WIFI
- BLUETOOTH
- ZIGBEE
- other 2.4 ghz and 5 ghz applications

## **Explosion protection**

Marking ATEX	Ex II 2G Ex eb IIC T6
Certification ATEX	Presafe 14ATEX4900X
	ATEX approved RF antenna.
Certification IECEx	PRE 14.0016X
	Other approvals and certificates, see www.bartec.com

## **Technical specifications**

Compatibility	802.11b+g+a+n and bluetooth
Frequency	2.4 and 5 GHz
Gain	2 dBi
Polarization	Vertical
Vertical beam width	80°
Horizontal beam width	360°
Impedance	50 Ohm
Max input voltage (amplitude)	15 V (EX limitation)
Max input power	2 Watts (EX limitation)
VSWR	< 1.5:1 avg.
Weight	0.21 lbs. (100g)
Length	5 in. (125 mm)
Wind survival	>150 MPH
Operating temperature	-20° C to to 60° C (-4° F to 185° F)
Mounting method	Wall/mast adapter
WiFi Certification	802.11a bgn
RF connections	TNC-RP as standard, N-type on request

## Installation guide



#### Checklist for Antenna / Wi-Fi Network Installation

01	Choose the shortest cable length possible.
02	Place antennas visible from several angles (corners etc).
03	Generally place the antenna as high on the wall as possible (10 cm clearance to ceiling).
04	Leave two wavelenghts (24 cm) between wall and antenna.
05	Don't hide the antenna behind obstacles.
06	Don't place the antenna horizontally.
07	Angle the antenna slightly downward when placed above ceiling height (check pattern).
08	Use a site survey tool to determine coverage (Netstumbler etc).
09	Check for Wi-Fi channel interference (using Netstumbler etc).
10	We recommend max 30 meters antenna cable for unamplied conguration and maximum 50 meters cable for amplied congurations.

## **Radiation pattern**



## **Ordering information**

order number	description
373572	ANTD01RBP Dual Band Antenna 1m
405271	ANTD02RBP Dual Band Antenna 2m
418277	ANTD05RBP Dual Band Antenna 5m
412797	ANTD10RBP Dual Band Antenna 10m
	* up to 30 m on request

# BARTEC TECHNOR AS

Vestre Svanholmen 24 4313 Sandnes, Norway Tel.: +47 51 84 41 00 Web: bartec-technor.no