

Xbeam-C

Sector antenna system for hazardous applications

PIXAVI

WiFi® 802.11abgn



II 2G EEx ib II T6

Sector antenna optimized for demanding environments.

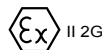
A sectorial antenna, optimized and certified for use creating hazardous safe wireless networks. The antenna relies on intrinsically safe signals and allows for a multitude of cable diameters that makes the antenna suited for a wide range of applications. The Xbeam-C can connect with up to 30 meters of cable length without significant loss of signal. The antenna has a narrow angle beam, providing better control of channel interference and overall coverage in large and complex wireless installations

A new trend at industrial sites is to install wireless networks to cut cabling cost and enable temporary network connections while maintaining communication speed and security. The cost/benefit of introducing wireless networks is even greater in hazardous and offshore environments, where cabling, throughputs, glands and manpower hours are more expensive.

An increasing number of EX PC terminals, EX PDAs, EX video terminals, control and monitoring systems are offered with integrated wireless networking. By installing wireless local networks, organizations can immediately start taking advantage of these new technologies.

The antenna is offered only as part of the EX-AP-A accesspoint and the EX-BAR-A barrier which is required in order to achieve the proper signal levels and protection for Intrinsic safety.

Technical specifications



EEx i II T6
DNV-2004-OSL-ATEX-0365X

Compatibility.....	802.11b+g+a and bluetooth
Frequency.....	2.4 and 5 GHz
Gain.....	14 dBi
Polarization.....	Vertical
Vertical beam width.....	20° and 15° (2 versions)
Horizontal beam width.....	90° and 120° (2 versions)
Impedance.....	50 Ohm
Max input voltage (amplitude).....	40V (EX limitation, limited by)
Max input power:.....	2 Watts (EX limitation)
VSWR.....	< 1.5:1 avg.
Weight.....	0.21 lbs. (100g)
Length.....	5 in. (125 mm)
Radome material.....	GRP, EX static labeled material
Wind survival.....	> 100 MPH
Operating temperature.....	-40° C to to 60° C (-40° F to 185° F)
Mounting method.....	Wall/mast adapter
Four mounting solutions, see :	EX-BRC-A and EX-IRO-A

WWW.PIXAVI.COM

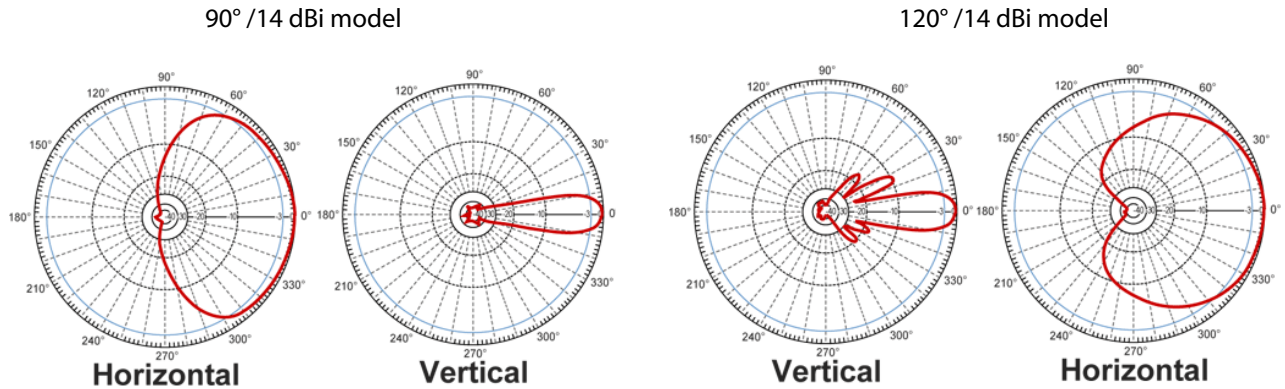
phone: +47 909 43 156

web: www.pixavi.com

email: sales@pixavi.com

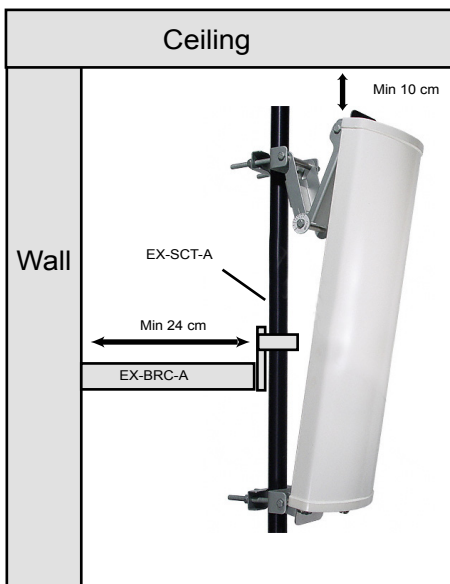
fax: +47 387 06 021

Xbeam-C Radiation pattern



Installation guide for Xbeam-C sectorial antenna series

A sectorial antenna is seldomly used alone, except for in point to point applications. Its' narrow radiation pattern yields increased coverage and gain within its coverage area, but multiple sector antennas must be installed to achieve coverage over multiple sectors. Large Wireless LAN installations often use sectorial antennas and omni-directional antennas in combination in order to secure the optimal coverage. For our Omnidirectional antennas, please have a look at our EX-ANT-B and the Xbeam-A



Checklist for Xbeam-C Sector Antenna Installation

1. Choose the shortest cable length possible
2. Place antennas visible from several angles (corners etc)
3. Generally place the antenna as high on the wall as possible (10 cm clearance to ceiling)
4. Leave two wavelengths (24 cm) between wall and antenna.
5. Don't hide the antenna behind obstacles
6. Don't place the antenna horizontally
7. Angle the antenna slightly downward when placed above ceiling height (check pattern)
8. Use a site survey tool to determine coverage. (Netstumbler etc)
9. Check for Wi-Fi channel interference (using Netstumbler etc)
10. We recommend max 30 meters antenna cable for unamplified configuration and maximum 50 meters cable for amplified configurations.
11. Coordinate with other sector antennas
12. Sector antennas must not be connector
13. Compare the radiated power to regulatorys in your country
14. Note that the antenna is not EX safe unless used with the EX-AP-A /EX-BAR-A

Ordering information

Included in the standard Xbeam-C
Antenna
Mounting brackets for 2" pipe

Order code: Xbeam-CXY
X =Frequency: 2=2.4 ghz, 5=5ghz
Y=Radiation angle: 1=90° (standard) , 2=120°

NOTE: The Xbeam-C an only be ordered with the EX-AP-A or Xpoint series access points