

iANT210 Intrinsically Safe Directional Sector Antenna



Range of external sector antennas offering a flexible solution to coverage in difficult environments

II 1 G Ex ia IIC T5/T6

-40°C to 80°C

IP65

Overview

The iANT210 is a series of sector antennas which are ATEX approved as simple apparatus for use of wireless networks in hazardous areas. The iANT210 is optimised for use in WLAN installations in the 2.4GHz and 5.8GHz spectrum for IEEE802.11 a/b/g wireless networks or wireless mesh Ethernet networks. It can be used with the Extronics range of access points and mesh routers such as the iWAP102, iWAP200 and iWAP300.

Indoor and Outdoor operation

The iANT210 is suitable for both indoor and outdoor operation, being constructed of weatherproof and UV stable plastic, with an aluminium back-plate. An N-type connector on the bottom of the antenna provides a robust and weatherproof connection.

Gain and Directionality

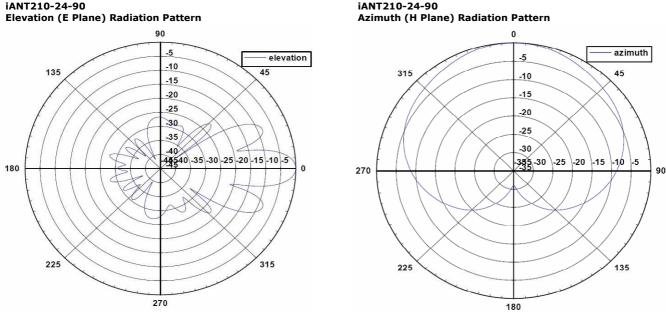
The iANT210 is available with an azimuth 3dB beamwidth of either 90° or 120° at 2.4GHz or 5.8GHz. This provides the user with a great deal of flexibility in designing coverage for complex wireless networks in difficult environments. In addition, the mounting bracket allows for up to a 25° downtilt, giving further flexibility.

Easy Mounting

The antenna can be easily mounted and positioned with the aluminium bracket supplied.

Diagrammatical Data

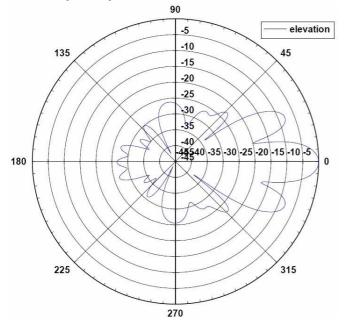
iANT210-24-90

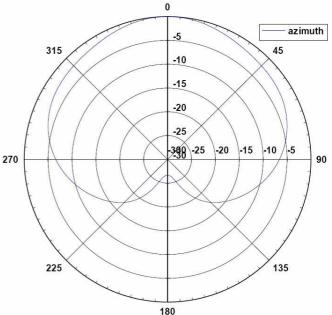




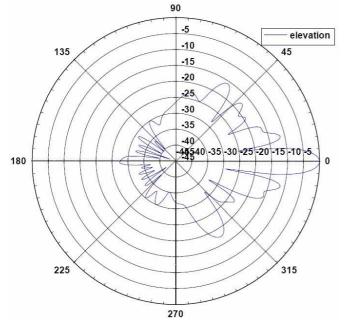
Specialists for intrinsically safe & explosion proof equipment

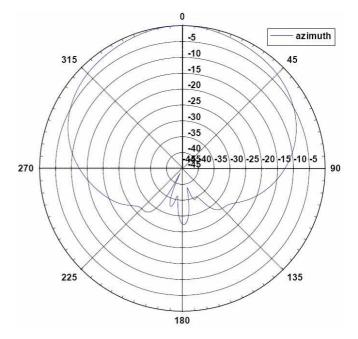
iANT210-24-120 Elevation (E Plane) Radiation Pattern





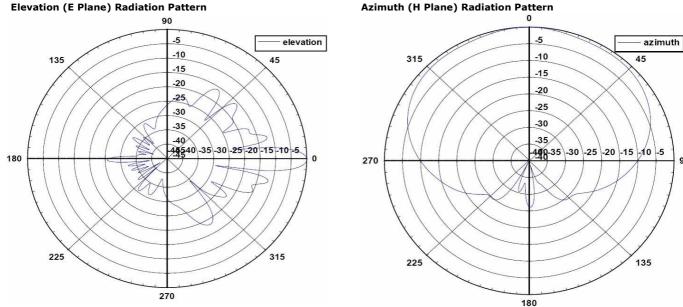
iANT210-58-90 Elevation (E plane) Radiation Pattern







90



iANT210-58-120

iANT210-58-120 Elevation (E Plane) Radiation Pattern

Specification

Dimensions435 x 225 x 75 mmWeightApprox 1KgConnectionsN-Type FemaleFrequency Range2.4 - 2.485 or 5.75 - 5.85 GHzImpedance50 OhmsGainIANT210-24-90 = 13.5 dBi IANT210-24-120 = 12.5 dBi IANT210-58-90 = 15.5 dBi IANT210-58-90 = 15.5 dBi IANT210-58-90 = 15.5 dBi IANT210-58-90 = 10° IANT210-58-90 = 200 IANT210-58-90 = 200 	-	
Connections N-Type Female Frequency Range 2.4 - 2.485 or 5.75 - 5.85 GHz Impedance 50 Ohms Gain iANT210-24-90 = 13.5 dBi iANT210-24-120 = 12 dBi iANT210-58-120 = 14 dBi VSWR 1.8 : 1 Azimuth (Horizontal) 3dB Beamwidth iANT210-24-90 = 90° iANT210-58-120 = 120° iANT210-58-120 = 120° Elevation (Vertical) 3dB Beamwidth iANT210-24-90 = 15° iANT210-58-10 = 120° Front-back ratio iANT210-24-90 = 15° iANT210-58-120 = 8° iANT210-58-120 = 8° Front-back ratio iANT210-24-90 = 31dB iANT210-58-120 = 8° iANT210-58-120 = 2dBB iANT210-58-120 = 2dBB iANT210-58-120 = 2dBB iANT210-58-120 = 2dBB Polarisation vertical Ambient Temperature -40°C to 80°C IP Rating IP65	Dimensions	435 x 225 x 75 mm
Frequency Range 2.4 + 2.485 or 5.75 - 5.85 GHz Impedance 50 Ohms Gain IANT210-24-90 = 13.5 dBi IANT210-24-120 = 12 dBi IANT210-24-120 = 12 dBi IANT210-58-90 = 15.5 dBi VSWR 1.8 : 1 Azimuth (Horizontal) 3dB Beamwidth IANT210-24-90 = 90° IANT210-58-120 = 14 dBi VSWR 1.8 : 1 Azimuth (Horizontal) 3dB Beamwidth IANT210-24-90 = 90° IANT210-58-90 = 90° IANT210-58-90 = 90° IANT210-58-90 = 90° Elevation (Vertical) 3dB Beamwidth IANT210-24-90 = 15° IANT210-58-90 = 8° IANT210-58-90 = 25° Front-back ratio IANT210-24-90 = 31dB IANT210-58-90 = 25dB IANT210-58-90 = 25dB IANT210-58-120 = 26dB Polarisation Vertical Ambient Temperature -40°C to 80°C IP Rating IP65	Weight	Approx 1Kg
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Front-back ratioiANT210-24-90 = 31dB iANT210-24-120 = 27dB iANT210-24-120 = 27dB iANT210-58-90 = 28dB iANT210-58-90 = 28dB iANT210-58-120 = 26dBPolarisationVerticalAmbient Temperature-40°C to 80°CIP RatingIP65	Elevation (Vertical) 3dB Beamwidth	$iANT210-24-120 = 15^{\circ}$ $iANT210-58-90 = 8^{\circ}$
iANT210-24-120 = 27dB iANT210-58-90 = 28dB iANT210-58-120 = 26dBPolarisationVerticalAmbient Temperature-40°C to 80°CIP RatingIP65	Downtilt	Variable 0° - 25°
Ambient Temperature -40°C to 80°C IP Rating IP65	Front-back ratio	iANT210-24-120 = 27dB iANT210-58-90 = 28dB
IP Rating IP65	Polarisation	Vertical
	Ambient Temperature	-40°C to 80°C
Certification Type Simple Apparatus	IP Rating	IP65
	Certification Type	Simple Apparatus
Certification II 1 G Ex ia IIC T5/T6	Certification	II 1 G Ex ia IIC T5/T6

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Ordering Information

Description

2.4 GHz Intrinsically Safe 90° Sector Antenna
2.4 GHz Intrinsically Safe 120° Sector Antenna
5.8 GHz Intrinsically Safe 90° Sector Antenna
5.8 GHz Intrinsically Safe 120° Sector Antenna

For alternative RF connector options please contact Extronics with your requirements

Part Number

iANT210-24-90 iANT210-24-120 iANT210-58-90 iANT210-58-120