

## iANT209 Intrinsically Safe Directional Panel Antenna



*External antenna offering a directional response for point-point links*

**II 2 G Ex ia IIC T6**

**-40°C to 80°C**

**IP68**

### Overview

The iANT209 is a panel antenna which is ATEX approved as simple apparatus for deployment of wireless networks in hazardous areas. The iANT209 is optimised for use in IEEE802.11 a/b/g wireless networks or wireless mesh Ethernet networks in the 2.4GHz or 5.8GHz bands. 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 iANT209 is suitable for both indoor and outdoor operation, as it is made from a rugged and durable material that is resistant to effectively any chemical or contaminant found in industry. Rated to IP68 and with -40°C to 80°C it is suitable for use in a wide range of climates. Connection is made via a sealed flying lead terminated in an N-type female connector. This provides a robust and weatherproof connection method.

#### Gain and Directionality

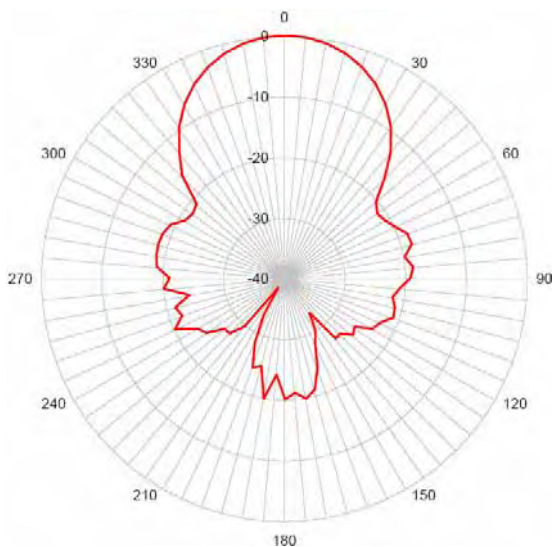
These antennas offer a high gain of up to 23 dBi as well as being directional meaning they will give excellent coverage in the direction that the antenna is facing. They are ideally suited to providing point-point links over short to medium distances.

#### Easy Mounting

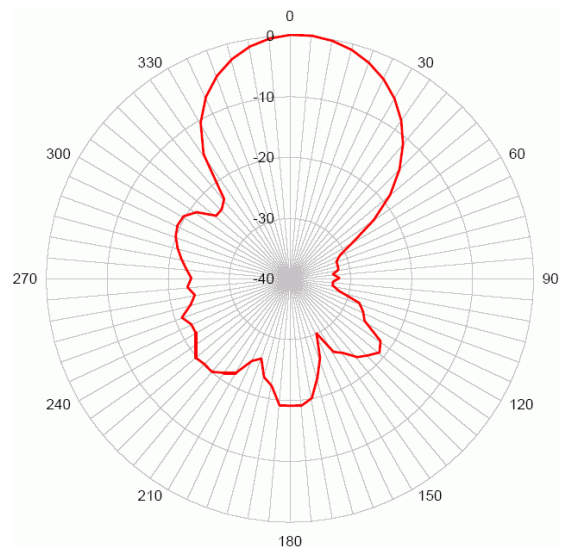
The iANT209 can be easily mounted and positioned with the bracket supplied. For details of alternative mounting options please contact Extronics.

### Diagrammatical Data

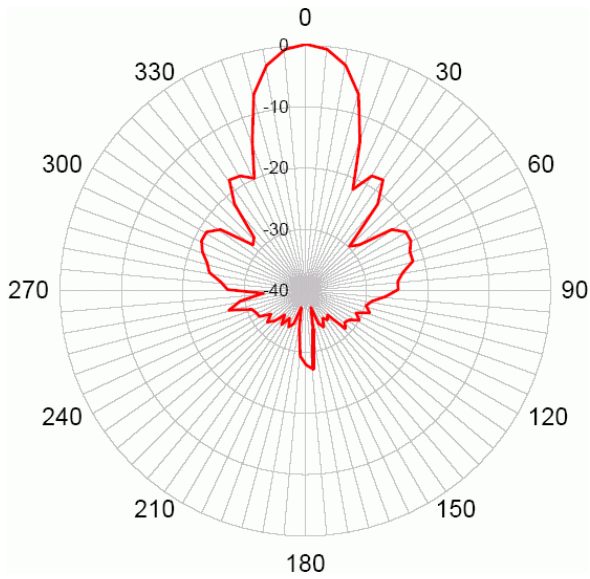
iANT209-24-14 Elevation (E Plane) Radiation Pattern



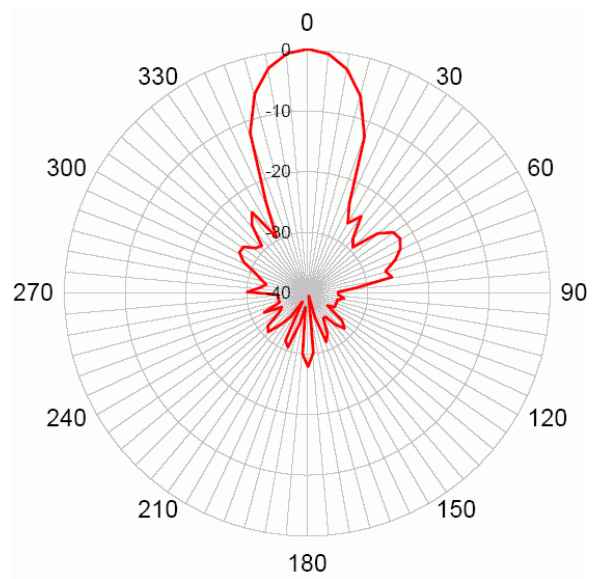
iANT209-24-14 Azimuth (H Plane) Radiation Pattern



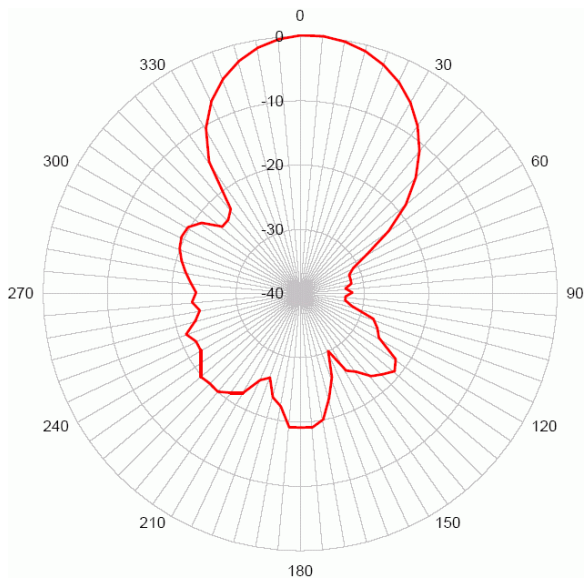
iANT209-24-19 Elevation (E Plane) Radiation Pattern



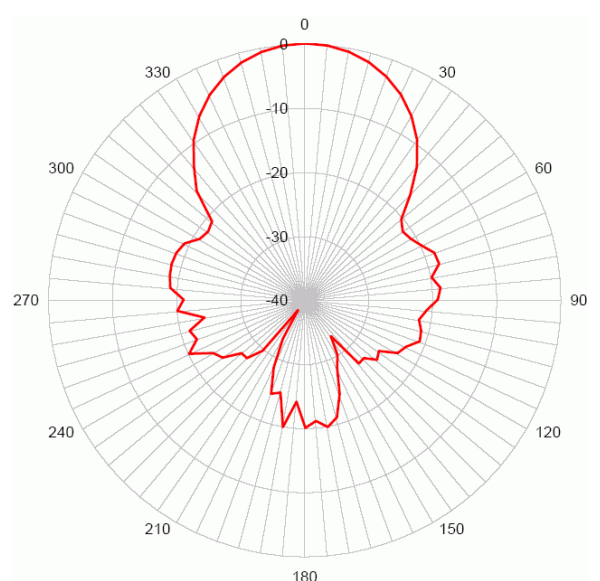
iANT209-24-19 Azimuth (H Plane) Radiation Pattern



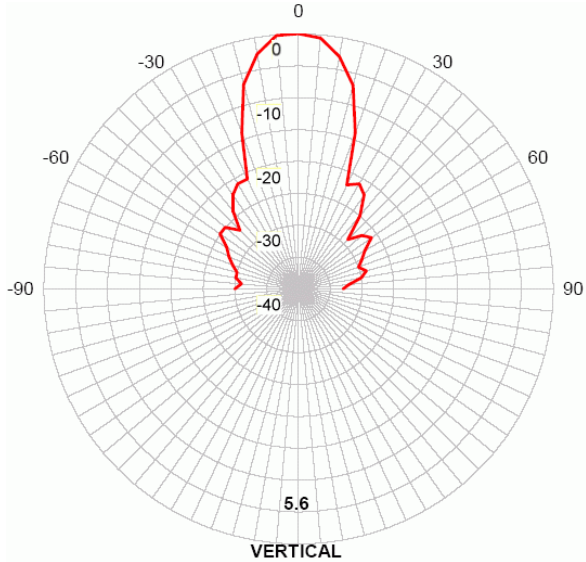
iANT209-58-13 Elevation (E Plane) Radiation Pattern



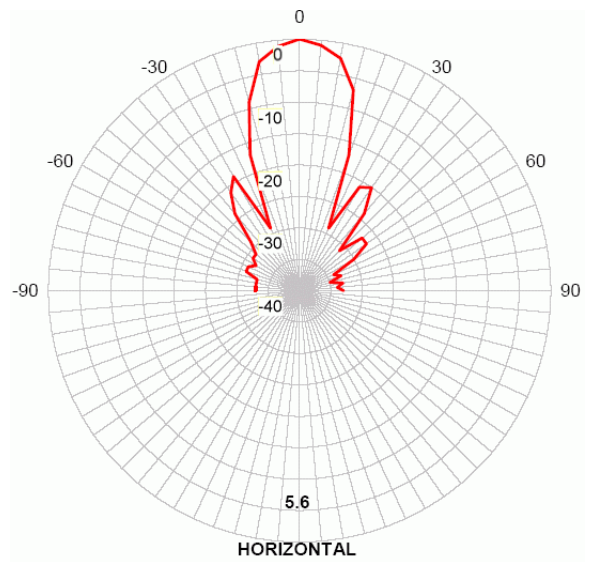
iANT209-58-13 Azimuth (H Plane) Radiation Pattern



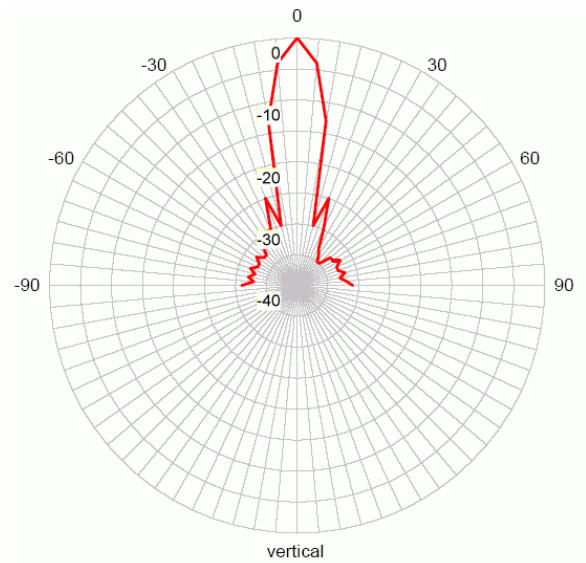
iANT209-58-19 Elevation (E Plane) Radiation Pattern



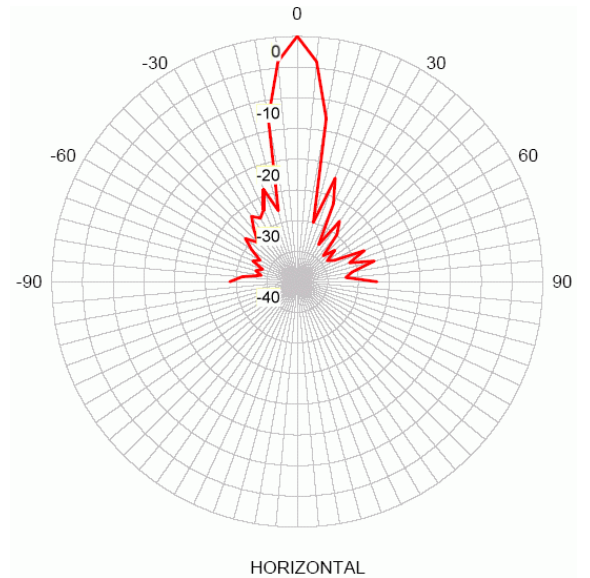
iANT209-58-19 Azimuth (H Plane) Radiation Pattern



iANT209-58-23 Elevation (E Plane) Radiation Pattern



iANT209-58-23 Azimuth (H Plane) Radiation Pattern



## Specification

<b>Dimensions</b>	iANT209-24-14 = 165 x 165 x 35 mm iANT209-24-19 = 330 x 330 x 40 mm iANT209-58-13 = 88 x 88 x 35 mm iANT209-58-19 = 165 x 165 x 35 mm iANT209-58-23 = 330 x 330 x 40 mm
<b>Weight</b>	iANT209-24-14 = 0.35 Kg iANT209-24-19 = 1.15Kg iANT209-58-13 = 0.2 Kg iANT209-58-19 = 0.35 Kg iANT209-58-23 = 1.15 Kg
<b>Connections</b>	N-Type Female
<b>Frequency Range</b>	2.4 - 2.5 or 5.1 - 5.9 GHz
<b>Impedance</b>	50 Ohms
<b>Gain</b>	iANT209-24-14 = 11.9 dBd / 14 dBi iANT209-24-19 = 16.9 dBd / 19 dBi iANT209-58-13 = 13 dBi ± 0.5dBi iANT209-58-19 = 19 dBi ± 0.5dB iANT209-58-23 = 23 dBi ± 0.5dB
<b>VSWR</b>	iANT209-24-14 = < 2 iANT209-24-19 = < 2 iANT209-58-13 = < 1.5 iANT209-58-19 = < 1.5 iANT209-58-23 = < 2
<b>Azimuth (Horizontal) 3dB Beamwidth</b>	iANT209-24-14 = 38° iANT209-24-19 = 21° iANT209-58-13 = 35° iANT209-58-19 = 20° iANT209-58-23 = 10°
<b>Elevation (Vertical) 3dB Beamwidth</b>	iANT209-24-14 = 39° iANT209-24-19 = 20° iANT209-58-13 = 35° iANT209-58-19 = 20° iANT209-58-23 = 10°
<b>Front-Back Ratio</b>	iANT209-24-14 = > 20 dB iANT209-24-19 = > 22 dB iANT209-58-13 = > 24 dB iANT209-58-19 = > 25 dB iANT209-58-23 = > 25 dB
<b>Polarization</b>	Vertical or Horizontal dependant on mounting orientation
<b>Ambient Temperature</b>	-40°C to 80°C
<b>IP Rating</b>	IP68
<b>Certification</b>	II 2 G Ex ia IIC T6
<b>Certification Type</b>	Simple Apparatus

## Ordering Information

Description	Part Number
2.4 GHz Directional Panel Antenna, 14dBi Gain	iANT209-24-14
2.4 GHz Directional Panel Antenna, 19dBi Gain	iANT209-24-19
5.8 GHz Directional Panel Antenna, 13dBi Gain	iANT209-58-13
5.8 GHz Directional Panel Antenna, 19dBi Gain	iANT209-58-19
5.8 GHz Directional Panel Antenna, 23dBi Gain	iANT209-58-23

For alternative RF connector options please contact Extronics with your requirements