

## iANT213 Omni Directional Rugged Antenna



*2.4GHz, 5GHz, GSM antennas offering increased flexibility for positioning with good general coverage.*

*Suitable for Groups I, II, III*

*-40°C to 70°C*

*Simple Apparatus*

*IP67*

### Overview

The iANT213 is a rugged antenna for use in hazardous areas. It is suitable for either indoor or outdoor use. The iANT213 is optimised for use in WLAN installations in the 2.4GHz/5.8GHz spectrum for IEEE802.11 b/g/n/ac wireless networks or 2.4GHz/5.8GHz wireless mesh Ethernet networks and 900/1800MHz GSM applications.

**Indoor and Outdoor operation-**The iANT213 is suitable for both indoor and outdoor operation, as it is made from durable weather resistant material with high IP rating. Rated to IP67 and -40°C to 70°C it can be used in every climate without concerns. Connection is made via the outdoor weatherproof type N-connector.

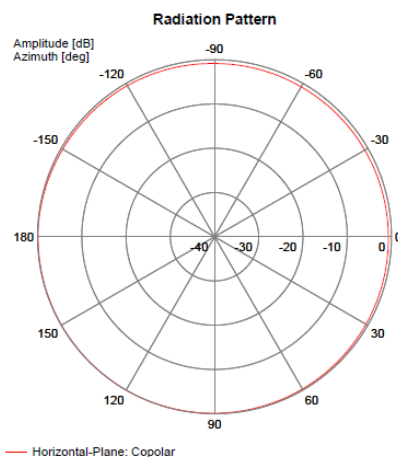
**Gain and Directionality-**The iANT213 offers a gain of 6dBi @ 2.4GHz, 5dBi @ 5.8GHz & 4/5dBi @ 900/1800MHz. With an omnidirectional pattern, it is ideally suited for use in applications where a good general coverage is required.

**Easy Mounting-**The antenna can be easily mounted and positioned with the 316L Stainless Steel bracket supplied.

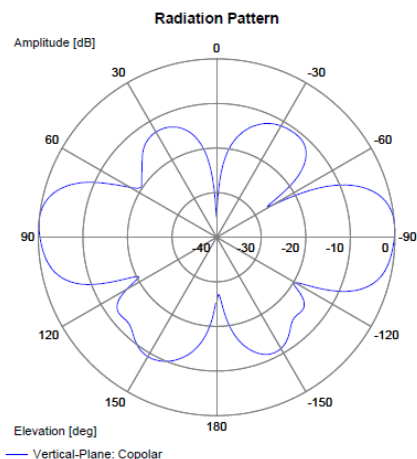
**Please Note:** The iANT2xx range of antennas is classed as "Simple Apparatus" under international intrinsic safety standards. IEC 60079-25 requires that simple apparatus equipment used in an intrinsically safe electrical system is compliant with IEC 60079-0, IEC 60079-11, IEC 60079-14 & IEC 60079-25. Extronics has assessed the iANT2xx antenna range together with our intrinsically safe certified wireless products to provide solutions compliant to all relevant standards. Therefore iANT2xx antennas can be deployed in a hazardous area, as part of an Extronics system, without the need to undergo further assessment. Compliance is also maintained if an iANT2xx antenna is used with the Extronics iSOLATE500 RF galvanic isolator. If the antenna is not to be used with Extronics' products, then the system designer must assess the hazard and demonstrate compliance to the relevant standards.

### Diagrammatical Data

2.4GHz Horizontal-Plane: Copolar

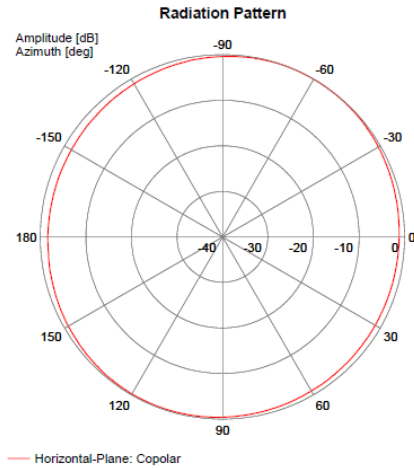


2.4GHz Vertical-Plane: Copolar

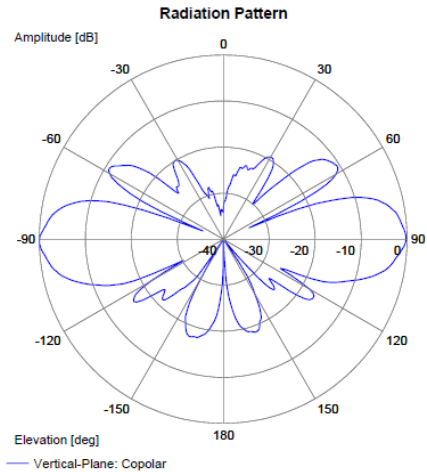


## Diagrammatical Data

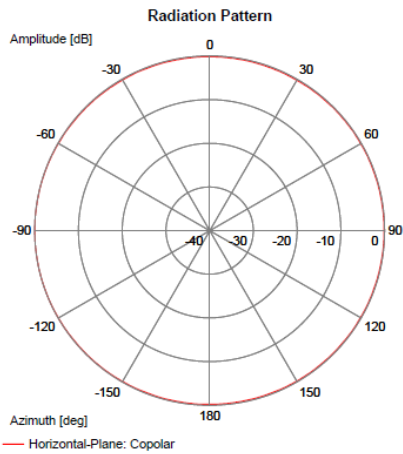
5 GHz Horizontal-Plane: Copolar



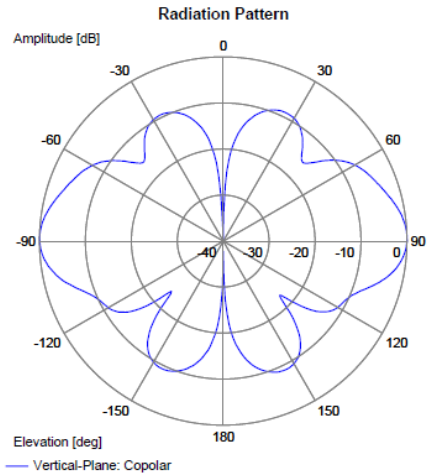
5 GHz Vertical-Plane: Copolar



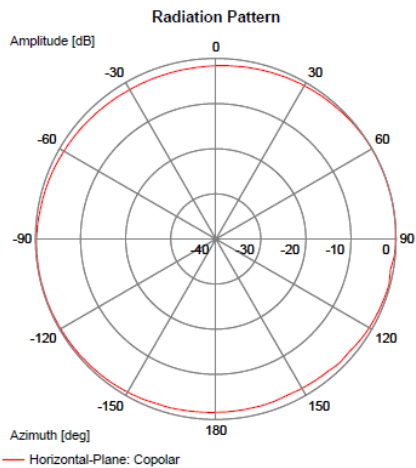
GSM Quad Band (900MHz) Horizontal-Plane: Copolar



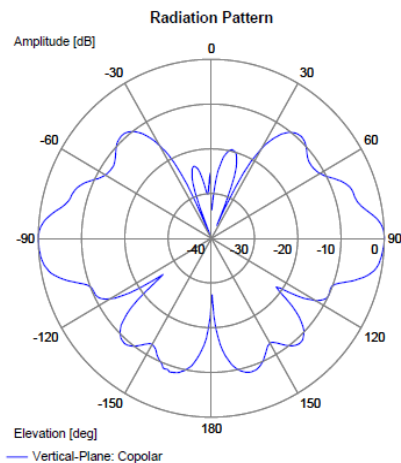
GSM Quad Band (900MHz) Vertical-Plane: Copolar



GSM Quad Band (1800MHz) Horizontal-Plane: Copolar

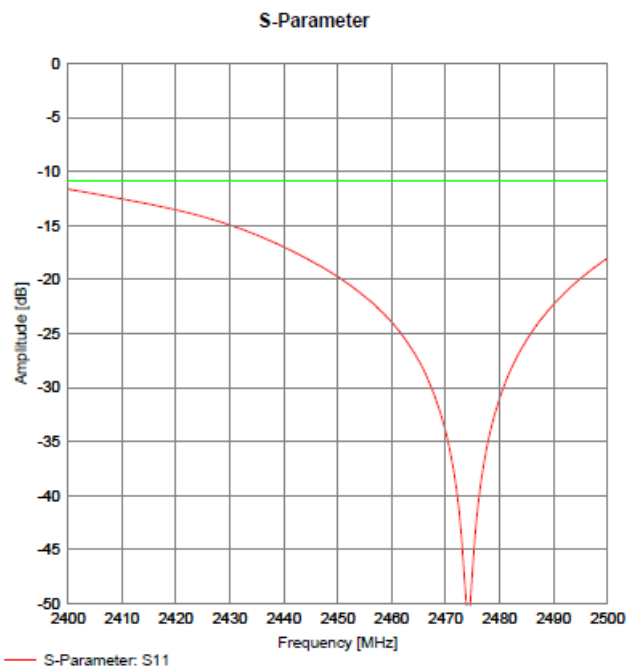


GSM Quad Band (1800MHz) Vertical-Plane: Copolar

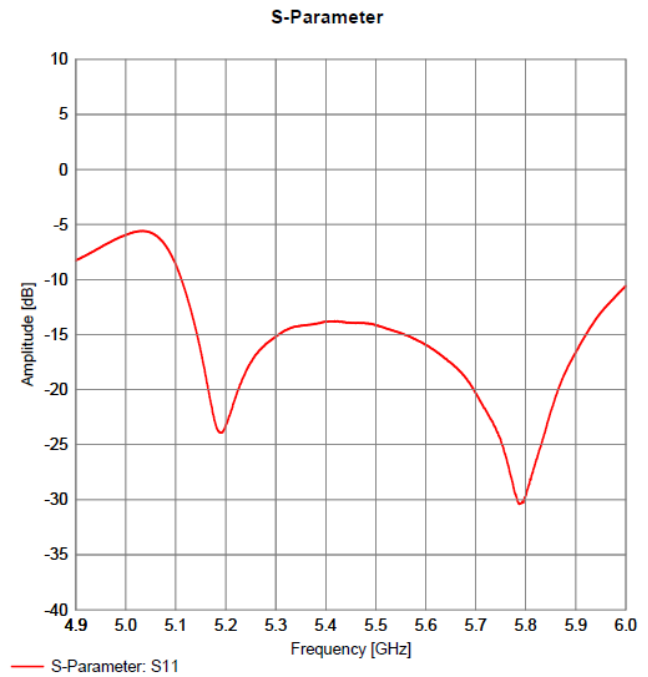


## Diagrammatical Data

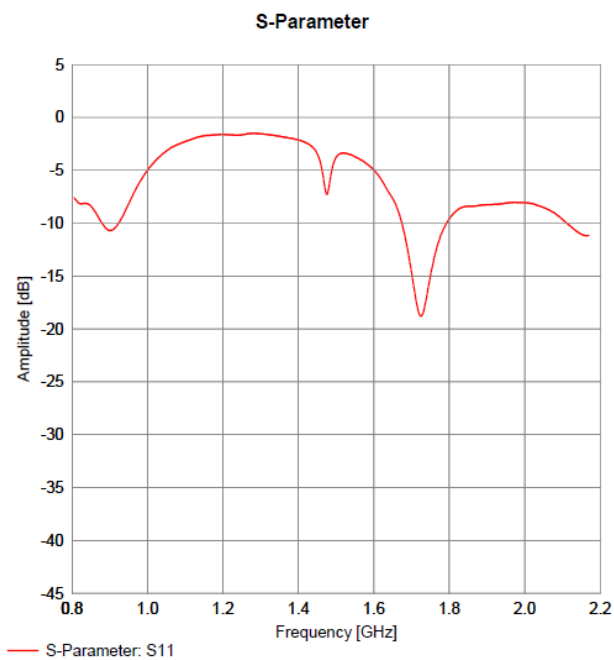
S Parameter: S11 (2.4GHz)



S Parameter: S11 (5GHz)



S Parameter: S11 (GSM Quad Band)





Wireless



Vision



Engineering



Tracking

## Specification

| Part Number                         | iANT213 –2400                                             | iANT213—5000                                | iANT213-QB                                 |
|-------------------------------------|-----------------------------------------------------------|---------------------------------------------|--------------------------------------------|
| <b>VSWR</b>                         | 1.8                                                       | 1.7                                         | 2.5                                        |
| <b>Gain (dBi)</b>                   | 6 dBi                                                     | 5 dBi                                       | 4 dBi , 5 dBi                              |
| <b>Frequency</b>                    | 2400-2500 MHz                                             | 5150— 5875 MHz                              | 806—960 MHz, 1710—2170 MHz                 |
| <b>Polarisation</b>                 | Vertical                                                  | Vertical                                    | Vertical                                   |
| <b>Wind load</b>                    | Frontal: 3N, Lateral: 3N at km/h                          | Frontal: 7N, Lateral: 7N at km/h            | Frontal: 7N, Lateral: 7N at km/h           |
| <b>Connector</b>                    | N, jack (female), bottom                                  | N, jack (female), bottom                    | N, jack (female), bottom                   |
| <b>Weight</b>                       | 0.3 kg                                                    | 0.3 kg                                      | 0.22 kg                                    |
| <b>IP Rating</b>                    | IP67                                                      | IP67                                        | IP67                                       |
| <b>Dimensions</b>                   | 250 x 22 (Height x Diameter)                              | 160 x 16 (Height x Diameter)                | 410.4 x 38 (Height x Diameter)             |
| <b>3dB beam width (h) (°)</b>       | 360                                                       | 360                                         | 360,360                                    |
| <b>3dB beam width (v) (°)</b>       | 30                                                        | 25                                          | 40, 20                                     |
| <b>Vertical Electrical tilt (°)</b> | 0                                                         | 0                                           | 0                                          |
| <b>Mast diameter (mm)</b>           | -                                                         | 38.1—76.2                                   | 54—100                                     |
| <b>Nominal impedance</b>            | 50 Ω                                                      | 50 Ω                                        | 50 Ω                                       |
| <b>Composite power max</b>          | 25 W @ 25 °C                                              | 20 W @ 25 ° C                               | 6 W @ 25 ° C                               |
| <b>Radome Colour</b>                | RAL 7035 light grey                                       | RAL 9002 grey-white                         | RAL 7035 light grey                        |
| <b>Radome material</b>              | Glass Fibre                                               | Polypropylene                               | Glass Fibre                                |
| <b>RoHS 2002/95/EC</b>              | Compliant                                                 | Compliant                                   | Compliant                                  |
| <b>ELV 2000/53/EC</b>               | -                                                         | Compliant                                   | -                                          |
| <b>Flammability rating</b>          | -                                                         | UL 94-HB                                    | -                                          |
| <b>Wind speed</b>                   | Operational: 160 km/h<br>Survival: 220 km/h               | Operational: 160 km/h<br>Survival: 220 km/h | Operational: 160 km/h<br>Survival: 200km/h |
| <b>Environmental conditions</b>     | Outdoor                                                   | Outdoor                                     | Outdoor                                    |
| <b>Operating temperature</b>        | -40 to 80°C                                               | -40 to 70°C                                 | -45 to 85°C                                |
| <b>Storage temperature</b>          | -40 to 80°C                                               | -40 to 70°C                                 | -45 to 85°C                                |
| <b>Mounting</b>                     | Supplied with Stainless Steel wall/pole mount bracket kit |                                             |                                            |

## Ordering Information

### iANT213 Zone 1 Omni Directional Antenna

#### Description

Omni Directional Antenna 2400MHz.  
Omni Directional Antenna 5000MHz.  
Omni Directional Antenna GSM Quad Band.

#### Part Number

iANT213-2400  
iANT213-5000  
iANT213-QB

## Accessories

|                                                                                               |         |
|-----------------------------------------------------------------------------------------------|---------|
| RF cable assembly 1m, N Type Crimp Plug Nickel to N Type Crimp Plug Nickel, RG58              | 7210025 |
| RF cable assembly 3m, N Type Crimp Plug Nickel to N Type Crimp Plug Nickel, RG58              | 7210027 |
| RF cable assembly 5m, N Type Crimp Plug Nickel to N Type Crimp Plug Nickel, RG58              | 7210026 |
| RF cable assembly 5m, N Type Crimp Plug Nickel to N Type Crimp Plug Nickel, LBC400 ExtraFlex  | 7210020 |
| RF cable assembly 10m, N Type Crimp Plug Nickel to N Type Crimp Plug Nickel, LBC400 ExtraFlex | 7210028 |
| RF cable assembly 15m, N Type Crimp Plug Nickel to N Type Crimp Plug Nickel, LBC400 ExtraFlex | 7210029 |
| RF cable assembly 20m, N Type Crimp Plug Nickel to N Type Crimp Plug Nickel, LBC400 ExtraFlex | 7210030 |