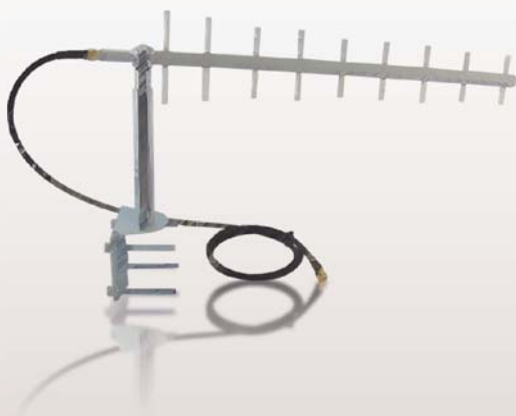


Accessories

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8.1	Applications & Selection Guides	P8-1-1
8.2	2.4 GHz Omni-directional External Antennas	P8-2-1
8.3	2.4 GHz Directional External Antennas	P8-3-1



8.1. Applications & Selection Guides

8

• Applications

Accessories

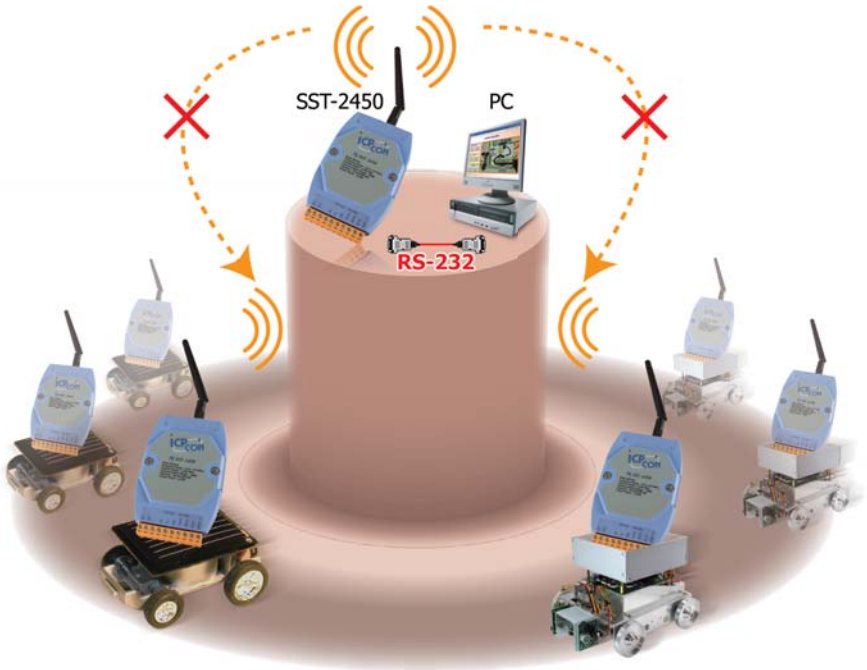
1. Omni-directional Antenna to Omni-directional Antenna

Note: As the antennas rely on line-of-sight for connection, they should be placed at the same height.

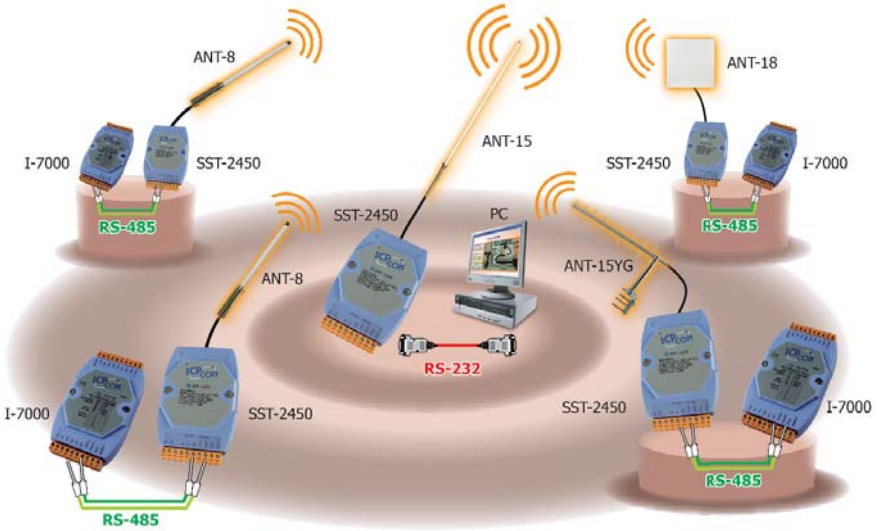


1

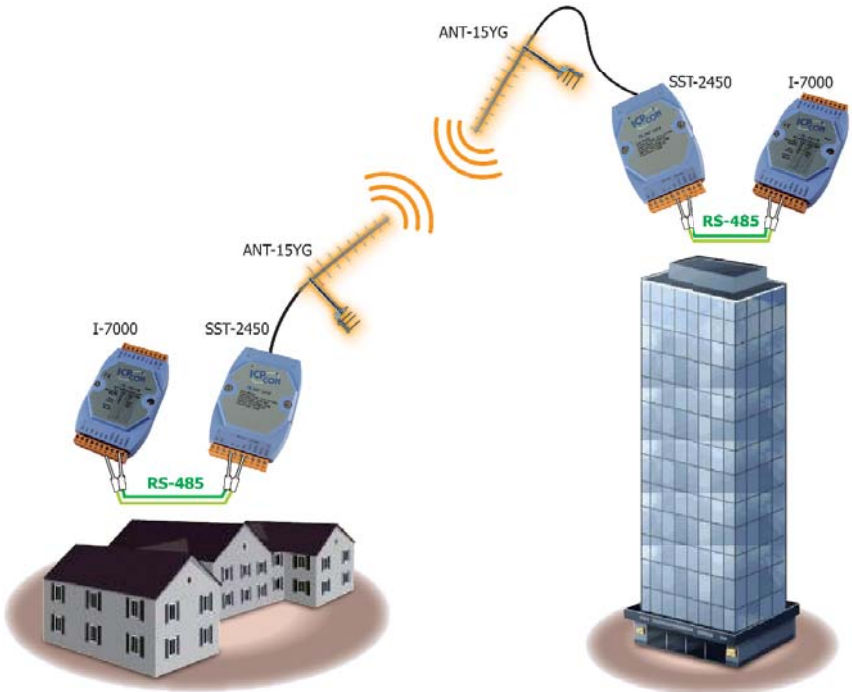
Applications & Selection Guides



2. Omni-directional Antenna to Directional Antenna



3. Directional Antenna to Directional Antenna



4. Connector Type for 2.4 GHz Antenna

8

Accessories

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Applications & Selection Guides

2.4 GHz Wireless Modules

Radio Modems

SST-900B



RF Modems

SST-2450





RPSMA Female
(Jack)

RPSMA Male
(Plug)

External Antennas

Omni-directional

ANT-8




ANT-15



Directional

ANT-15YG



ANT-18



• Selection Guide



2.4 GHz Omni-directional Antennas

Model Name	Ordering Information	Connector	Radiation	Band	Gain (dBi)	Note	Page
ANT-8	1 km, 2.4 GHz External Antenna	RP SMA Male (Plug)	Omni-Directional	2.4 ~ 2.5 GHz	8	Dipole	8-2-1
ANT-15	5 km, 2.4 GHz External Antenna	RP SMA Male (Plug)	Omni-Directional	2.4 ~ 2.5 GHz	15	Dipole	8-2-2



2.4 GHz Directional Antennas

Model Name	Ordering Information	Connector	Radiation	Band	Gain (dBi)	Note	Page
ANT-15YG	5 km, 2.4 GHz External Antenna	RP SMA Male (Plug)	Directional	2.4 ~ 2.5 GHz	15	Yagi	8-3-1
ANT-18	9 km, 2.4 GHz External Antenna	RP SMA Male (Plug)	Directional	2.4 ~ 2.5 GHz	18	Panel	8-3-2

8.2. 2.4 GHz Omni-directional External Antenna



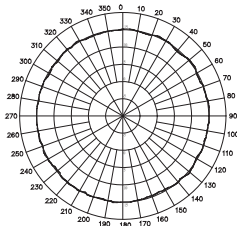
Introduction

ANT-8 is a 10 dBi Antenna

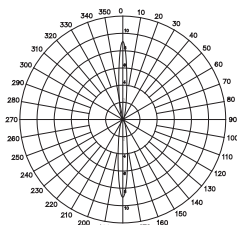
Applications

For ZigBee and SST-2450 Products

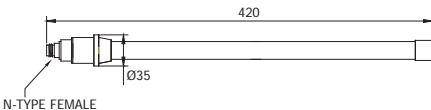
H-PLANE FIELD PATTERNS



E-PLANE FIELD PATTERNS



Dimensions (Units: mm)



Features

- 802.11b/g
- 10 dBi
- N Type Female (Jack)
- N Type Male (Plug) to RP SMA Male (Plug) Cable



Specifications

Antenna Type	
Operating Environment	Indoor or Outdoor
Radiation	Directional Sector
Electrical Specifications	
Frequency Range	2400 ~ 2500 MHz
Gain	9 dBi
VSWR	1.3:1 (Max.)
Polarization	Linear
HPBW/Horizontal	360°
HPBW/Vertical	10°
Power Handling	15 W (Max.)
Impedance	50 Ω +/-5 Ω
Cable	-
Connector	N Type Female
Environmental and Mechanical Characteristics	
Operating Temperature	-20 °C ~ +60 °C
Radome Material	Glass fiber
Weight	430 g
Dimensions (L x W)	420 mm x Ø35 mm

Ordering Information

ANT-8	1 km, 2.4 GHz External Antenna (Omnidirectional) Gain: 8 dBi
Includes	3S004 x 1 HDF 200 Cable, 1 m N Type Male to SMA Male
Important Note: Distance data is for reference only. Actual results may be different depending on the environment.	

Accessories

3S005	HDF 200 Cable, 3 Meter Long N Type Male to SMA Male
3S006	HDF 200 Cable, 5 Meter Long N Type Male to SMA Male



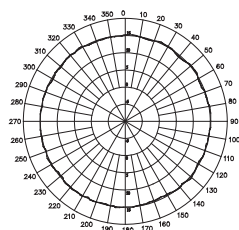
Introduction

ANT-15 is a 15 dBi Antenna

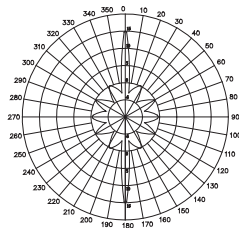
Applications

For ZigBee and SST-2450 Products

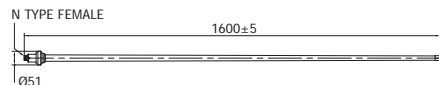
H-PLANE FIELD PATTERNS



E-PLANE FIELD PATTERNS



Dimensions (Units: mm)



Features

- 802.11b/g
- 15 dBi
- N Type Female (Jack)
- N Type Male (Plug) to RP SMA Male (Plug) Cable



Specifications

Antenna Type	
Operating Environment	Outdoor
Radiation	Directional Sector
Electrical Specifications	
Frequency Range	2400 ~ 2500 MHz
Gain	15 dBi
VSWR	1.3:1 (Max.)
Polarization	Linear
HPBW/Horizontal	360°
HPBW/Vertical	10°
Power Handling	20 W (Max.)
Impedance	50 Ω +/-5 Ω
Cable	RG-58, 100 cm
Connector	N Type Female
Environmental and Mechanical Characteristics	
Operating Temperature	-20 °C ~ +60 °C
Radome Material	Glass fiber
Weight	1050 g
Dimensions (L x W)	1600 mm x 35 mm

Ordering Information

ANT-15	5 km, 2.4 GHz External Antenna (Omnidirectional) Gain: 15 dBi
Includes	3S004 x 1 HDF 200 Cable, 1 m N Type Male to SMA Male
Important Note: Distance data is for reference only. Actual results may be different depending on the environment.	

Accessories

3S005	HDF 200 Cable, 3 Meter Long N Type Male to SMA Male
3S006	HDF 200 Cable, 5 Meter Long N Type Male to SMA Male

8.3. 2.4 GHz Directional External Antenna



Features

- 802.11b/g
- 15 dBi
- N Type Female (Jack)
- N Type Male (Plug) to RP SMA Male (Plug) Cable
- Yagi Antenna



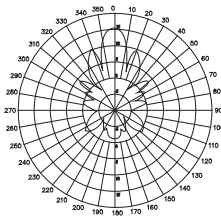
Introduction

ANT-15YG is a 15 dBi Antenna

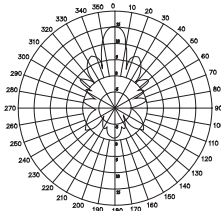
Applications

For ZigBee and SST-2450 Products

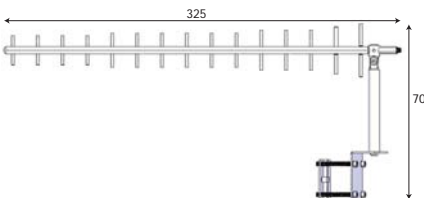
H-PLANE FIELD PATTERNS



E-PLANE FIELD PATTERNS



Dimensions (Units: mm)



Specifications

Antenna Type	
Operating Environment	Outdoor
Radiation	Directional Sector
Electrical Specifications	
Frequency Range	2400 ~ 2500 MHz
Gain	15 dBi
VSWR	2:1 (Max.)
Polarization	Linear
HPBW/Horizontal	25°
HPBW/Vertical	18°
Power Handling	10 W (Max.)
Impedance	50 Ω
Cable	RG-58, 100 cm
Connector	N Type Female
Environmental and Mechanical Characteristics	
Operating Temperature	-40 °C ~ +85 °C
Radome Material	Aluminum
Weight	425 g
Dimensions (L x W)	325 mm x 70 mm x 15 mm

Ordering Information

ANT-15YG	5 km, 2.4 GHz External Antenna (Directional) Gain: 15 dBi
Important Note: Distance data is for reference only. Actual results may be different depending on the environment.	

Accessories

3S005	HDF 200 Cable, 3 Meter Long N Type Male to SMA Male
3S006	HDF 200 Cable, 5 Meter Long N Type Male to SMA Male



ANT-18

9 km, 2.4 GHz External Antenna

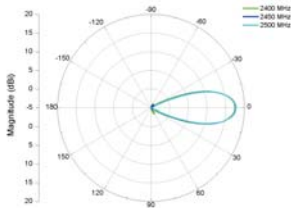
Introduction

ANT-18 is a 18 dBi Antenna

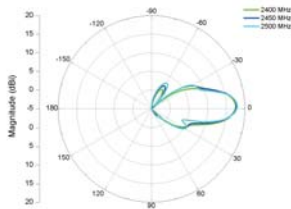
Applications

For ZigBee and SST-2450 Products

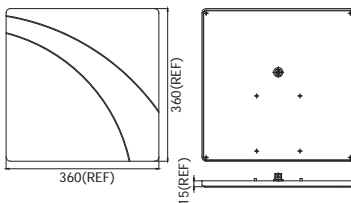
H-PLANE Co-polarization Pattern



V-PLANE Co-polarization Pattern



Dimensions (Units: mm)



Features

- 802.11b/g
- 15 dBi
- N Type Female (Jack)
- N Type Male (Plug) to RP SMA Male (Plug) Cable
- Panel Antenna



Specifications

Antenna Type	
Operating Environment	Outdoor
Radiation	Directional Patch
Electrical Specifications	
Frequency Range	2400 ~ 2500 MHz
Gain	18 dBi
VSWR	1.5:1 (Max.)
Polarization	Vertical
HPBW/Horizontal	15°
HPBW/Vertical	15°
Power Handling	50 W (cw)
Impedance	50 Ω
Cable	RG-58, 100 cm
Connector	N Type Female
Environmental and Mechanical Characteristics	
Operating Temperature	-40 °C ~ +80 °C
Radome Material	ABS
Weight	1600 g
Dimensions (L x W x H)	360 mm x 360 mm x 16 mm

Ordering Information

ANT-18	9 km, 2.4 GHz External Antenna (Directional) Gain: 18 dBi
Includes	3S004 x 1 HDF 200 Cable, 1 m N Type Male to SMA Male
Important Note: Distance data is for reference only. Actual results may be different depending on the environment.	

Accessories

3S005	HDF 200 Cable, 3 Meter Long N Type Male to SMA Male
3S006	HDF 200 Cable, 5 Meter Long N Type Male to SMA Male

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