

# 2.4 GHz Horizontally Polarized Sectorized Omnidirectional Array Quad-Antenna Array

# **Applications and Features**

#### Applications:

- 2.4 GHz ISM Band
- IEEE 802.11b and 802.11g Wireless LAN
- Point to Multi-Point Systems
- Wireless Broadband Systems

#### Features:

- Quad Antenna Array
- High performance 90° horizontally polarized sectorial antennas
- 360° coverage
- 0-20° mechanical up/down tilt
- Available in single fed or individual fed models
- Single fed models feature 4-Way signal splitter and jumper cables
- DC ground lightning protection
- Can be mounted to round or square masts
- Stainless steel construction for all-weather operation
- Horizontal polarization
- Available in 14 dBi\* versions

## Models

Frequency	Gain	Splitter Connectors	Includes	Part Number
2.4 GHz	14 dBi*	N-Female	<ul> <li>(4) 90° Horizontal Polarized Sector Antennas</li> <li>(1) 4-Way Signal Splitter w/N-Female Connectors</li> <li>(4) 2 ft. WBC400 Jumper Cables - N-Male to N-Male</li> <li>(1) Array Mounting System</li> </ul>	HK2414H-090NF
		RP-TNC Jack	<ul> <li>(4) 90° Horizontal Polarized Sector Antennas</li> <li>(1) 4-Way Signal Splitter w/RP-TNC Jack Connectors</li> <li>(4) 2 ft. WBC400 Jumper Cables - N-Male to RP-TNC Plug</li> <li>(1) Array Mounting System</li> </ul>	HK2414H-090RT
	1	Individua	I Fed Models (4 Inputs into 4 Antennas)	
Frequency	Gain	Antenna Connectors	Includes	Part Number
2.4 GHz	14 dBi*	N-Female	<ul><li>(4) 90° Horizontal Polarized Sector Antennas</li><li>(1) Array Mounting System</li></ul>	HK2414H-090

# Description

#### Superior Performance

The HyperGain® Sectorized Omni Array features our high performance 2.4 GHz 90° horizontally polarized sectorial antennas. Each of the four antennas in this array can be adjusted individually (0-20° up or down tilt) to compensate for the geography of the installation location. This helps ensure maximum coverage of the array for service providers in the 2.4GHz ISM band.







## **Horizontally Polarized**

Since this array is horizontally polarized, it is ideal for use in areas susceptible to the affects of interference generated by commonly used vertically polarized wireless LAN equipment. With the reduction of this interference better wireless reception can be achieved.

## Flexibility of Single or Individual Feeds

Ideal for smaller applications, the sectorized omni array is available as a single fed system (1 input into 4 antennas). Since each antenna is fed from a 4-Way signal splitter, only a single radio/amplifier is required. As the system grows additional capacity can be added by simple adding more base station radios and bypassing the splitter's array, thus feeding each antenna from a separate radio. Single fed models feature a industrial grade 4-Way signal splitter (with N-Female or RP-TNC Jack connectors) and four 2 ft. (0.6m) WBC400 jumper cables.



(Signal Splitter Detail)

For higher system capacities, the array can be purchased as a individual fed system (each antenna fed individually). The advantage of this type of system includes higher gain than the single fed systems and better isolation of each of the four antennas. Interference from adjoining antennas is reduced thus improving performance.

#### Heavy Duty Construction

The sectorized omni arrays are designed for all-weather operation. They feature heavy-duty plastic antenna radomes and stainless steel mounting systems. The array can be mounted directly onto masts 1¼" to 2" (31.7 to 50.8mm) in dia using the provided U-Bolts or bolted directly to square masts/beams up to 3¼" (82.5mm) square. The mounting bracket can also accept 3" (76.2 mm) U-Bolts (not included) for larger masts.

Frequency	2400 - 2500 MHz	
Antenna Gain	14 dBi*	
Polarization	Horizontal	
Horizontal Beam Width (Individual antenna)	90°	
Vertical Beam Width (Individual antenna)	20°	
Front to Back Ratio (Individual antenna)	> 21 dB	
Lightning Protection	DC Ground	
Power Rating (Single Fed)	25 Watts	
Antenna Radome Material	UV-inhibited Plastic	
Mounting System Material	Stainless Steel	
Mounting (Round Mast)	1¼" to 2" (31.7 to 50.8 mm) dia.	
Mounting (Square Mast/Beam)	3¼" (82.5 mm) square max.	
Dimensions **(O.D. Panels Fully Retracted)	20" (508 mm) x 17" (432 mm) O.D.**	
Weight	19 lbs. (8.6 kg)	

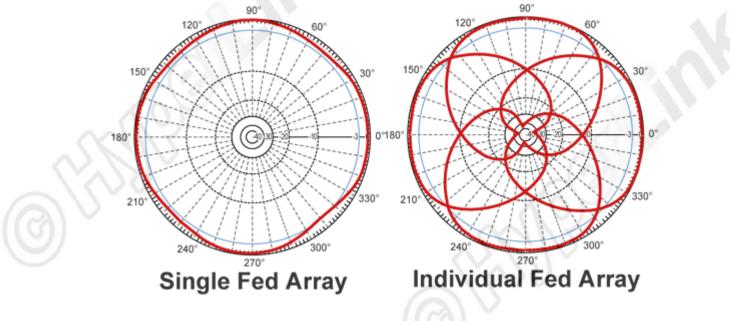
## **Specifications**

\* Antenna gains specified when sectors are individually fed.





# **RF Antenna Gain Patterns**



# **Guaranteed Quality**

This product is backed by Hyperlink's Limited Warranty.

