

# 2.4 GHz Sectorized Omnidirectional Antenna Array with Four 90 Degree Sectorial Antennas

## **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 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
- Design helps optimize tower space
- Stainless steel construction for all-weather operation
- Vertical polarization
- Available in 14 dBi\*, 17 dBi\* and 20 dBi\* versions



(17 dBi Version Shown)

#### **Models**

Single Fed Models (1 Input into 4 Antennas)						
Frequency	Gain	Splitter Connectors	Includes	Part Number		
2.4 GHz	14 dBi*	N-Female	<ul> <li>(4) 90° Sector Antennas</li> <li>(1) 4-Way Signal Splitter w/N-Female Connectors</li> <li>(4) 2 ft. 400-Series Jumper Cables - N-Male to N-Male</li> <li>(1) Array Mounting System</li> </ul>	HK2414-090NF		
		RP-TNC Jack	<ul> <li>(4) 90° Sector Antennas</li> <li>(1) 4-Way Signal Splitter w/RP-TNC Jack Connectors</li> <li>(4) 2 ft. 400-Series Jumper Cables - N-Male to RP-TNC Plug</li> <li>(1) Array Mounting System</li> </ul>	HK2414-090RT		
2.4 GHz	17 dBi*	N-Female	<ul> <li>(4) 90° Sector Antennas</li> <li>(1) 4-Way Signal Splitter w/N-Female Connectors</li> <li>(4) 2 ft. 400-Series Jumper Cables - N-Male to N-Male</li> <li>(1) Array Mounting System</li> </ul>	HK2417-090NF		
	25)	RP-TNC Jack	<ul> <li>(4) 90° Sector Antennas</li> <li>(1) 4-Way Signal Splitter w/RP-TNC Jack Connectors</li> <li>(4) 2 ft. 400-Series Jumper Cables - N-Male to RP-TNC Plug</li> <li>(1) Array Mounting System</li> </ul>	HK2417-090RT		
2.4 GHz	20 dBi*	N-Female	<ul> <li>(4) 90° Sector Antennas</li> <li>(1) 4-Way Signal Splitter w/N-Female Connectors</li> <li>(4) 2 ft. 400-Series Jumper Cables - N-Male to N-Male</li> <li>(1) Array Mounting System</li> </ul>	HK2420-090NF		
		RP-TNC Jack	<ul> <li>(4) 90° Sector Antennas</li> <li>(1) 4-Way Signal Splitter w/RP-TNC Jack Connectors</li> <li>(4) 2 ft. 400-Series Jumper Cables - N-Male to RP-TNC Plug</li> <li>(1) Array Mounting System</li> </ul>	HK2420-090RT		





Individual Fed Models (4 Inputs into 4 Antennas)							
Frequency	Gain	Antenna Connectors	Includes	Part Number			
2.4 GHz	14 dBi*	N-Female	(4) 90° Sector Antennas (1) Array Mounting System	HK2414-090			
2.4 GHz	17 dBi*	N-Female	(4) 90° Sector Antennas (1) Array Mounting System	HK2417-090			
2.4 GHz	20 dBi*	N-Female	(4) 90° Sector Antennas (1) Array Mounting System	HK2420-090			

## Description

#### **Superior Performance**

The HyperGain® Sectorized Omni Array features our high performance 2.4 GHz 90° 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.

#### Flexibility of Single or Individual Feeds

Ideal for smaller applications, the sectorized omni quad 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) 400-Series jumper cables. For higher system capacities, the array can be purchased as a individual fed system (each antenna fed individually). The advantages 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.



(Signal Splitter Detail)

#### **Heavy Duty Construction**

The sectorized omni array is designed for all-weather operation. It features heavy-duty plastic antenna radomes and stainless steel mounting systems. The array can be mounted directly onto masts 1½" to 2" (31.7 to 50.8 mm) in dia using the provided U-Bolts. The mounting bracket can also accept 3" (76.2 mm) U-Bolts (not included) for larger masts.

#### **Additional Product Photos**



# 17 dBi\* Array shown in down-tilt configuration





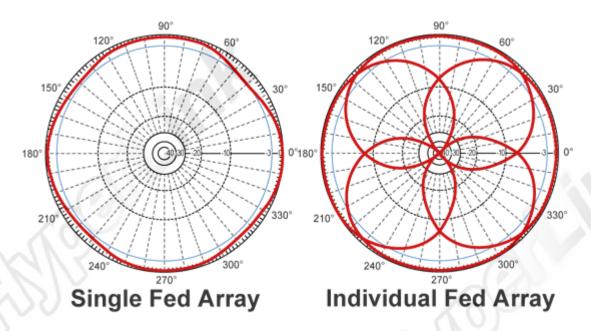


# **Specifications**

Models	HK2414-090	HK2417-090	HK2420-090	
Frequency	2400 - 2500 MHz			
Antenna Gain	14 dBi*	17 dBi*	20 dBi*	
Polarization	Vertical			
Horizontal Beam Width (Individual antenna)	90°	90°	90°	
Vertical Beam Width (Individual antenna)	15°	6.5°	5°	
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.			
Dimensions **(O.D. Panels Fully Retracted)	20" (508 mm) x 17" (432 mm) O.D.**	39" (990 mm) x 18".7 (476 mm) O.D.**	39" (990 mm) x 18.7" (476 mm) O.D.**	
Weight	19 lbs. (8.6 kg)	48 lbs. (22 kg)	56 lbs. (25 kg)	
RoHS Compliant	Yes	1/2x \ V	•	

<sup>\*</sup> Antenna gains specified when sectors are individually fed.

#### **RF Antenna Gain Patterns**



# **Guaranteed Quality**

This product is backed by Hyperlink's Limited Warranty.

