

Important Installation Notes High Isolation 3-Sector Antenna Cluster SECT-3-14-2.4-ISO Part No. 925940



## Maintain 120° Azimuth for antenna separation.

The 3-sector antenna cluster has been designed to allow the use of three BreezeACCESS II Access Units (AU). While each sector is fed individually, proper antenna isolation must be achieved precisely. This minimizes interference with adjacent sectors, preserving the neighboring links quality, and antenna pattern.

# This antenna cluster must be installed maintaining exactly a 120° azimuth for each sector. Failure to do this will result in severe performance degradation.





# Use only with three BreezeACCESS II Access Units (AU)

The antenna system has been designed to allow the use of three BreezeACCESS II Access Units (AU). Alvarion does not recommend the use of a power combiner with the 3-sector antenna cluster.

The use of a combiner affects the radiation pattern of the antenna cluster with 12 dB nulls (radiation gaps), and adds significant insertion loss.

The use of a power combiner will cause severe performance degradation.

### BreezeACCESS II - Outdoor Unit Placement

The three-sector antenna cluster comes with an 18-inch pigtail to connect each antenna to the BreezeACCESS Outdoor Unit. It is recommended that the Outdoor Unit is connected to each antenna without additional cable extensions to minimize cable loss and maximize the antenna gain.

Below are the suggested placements for each outdoor unit.





#### Mechanical Tilt Adjustments

The 3-sector antenna cluster can be mechanically adjusted up to  $\pm$  15 degrees per sector without affecting the side lobe levels, minimizing the system's susceptibility to interference from neighboring sectors.

#### **Mounting Flexibility**

The mounting for the 3-sector antenna cluster permits installation directly around the tower (1.25" to 3.25" OD). This design allows flexibility and minimizes wind load on the tower.

### **Technical Specifications**

General Specifications: 2.4 GHz ISM 3-Sector Antenna Cluster **Polarization:** Vertical

Radome material: ASA-ABS, UV resistant Lightning Protection: DC grounded

Electrical Specifications								
Model No.	Frequency Range	Nominal Gain	Azimuth Beamwidth	E-Plane Beamwidth	Connector	VSWR	Max Power	Nominal Isolation
SECT-3-14-2.4-ISO	2.4 – 2.5 GHz	14 dBi	120° Per Sector	16°	N Male	<1.5:1	50 watts	-68 dB
Mechanical Specifications								
Model No.	Rated Wind Velocity (Lateral Trust)	Temp. Range	Dimensions	s Mechanica Tilt	ll Weight	Cable	Mount	
SECT-3-14-2.4-ISO	125 MPH 138 lb @ 125 MPH	-40° C to +85° C	19.75" x 4.7" x	-5° UP to 3" +10° DWN Per Sector	9 lbs	18" LMR195	Pipe Adjustable 1.25" - 3.25" OD (1.25" OD Pipe Included)	

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