Quad-Sector Array Antennas



Peak Antennas' Quad-Sector Array antennas comprise four high gain arrays in one radome, each array providing sector coverage with maximum gain in one of the 0, 90, 180 and 270 degree azimuth directions.

Linear vertical polarization is standard, but some circularly polarized models are available, each with four or eight elevation tiers providing maximum gains between 12 and 14.5 dBi with elevation beamwidths 18 degrees and 9 degrees, respectively. The antennas are housed in robust fibreglass tubes, and feature an enhanced dual barrier water seal at the top, comprising an aluminum alloy overcap RTV'ed over a delrin top cap that is glued into the tube. There is a breathe hole in the base.

For **TX Switchable** applications the antennas feature an internal PIN diode RF switching circuit, with 0V default to the 0 degree sector. The other sectors are selected by applying a DC control voltage (8 to 28V DC there are built-in regulators) via the KPT control connectors. There is a single N female RF connector.

For **RX Diversity** applications the antennas feature four N female RF connectors, one for each array.

Dual-Band Quad-Sector antennas are also available (see Dual-Band data sheet).

QSA225-12-V-RX QSA470-12-V-RX

All the antennas feature:

Gain (per-sector): 12 or 14.5 dBi Frequency: See schedule over Elevation B/W: 18 or 9 degrees 110 degrees (vert.), 90 degrees (RHCP) Azimuth B/W: Polarization: Vertical or RHCP Axial Ratio (for CP version only): 3 dB typical Return loss: 14 dB typical (1.5 to 1 VSWR) Diameter and Length: See schedule over Connector: N female Mount: Stainless steel bracket and U bolts



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Designation	Frequency	Gain	Elevation B/W	Azimuth B/W	Diameter	Length
QSA225-12	2.0-2.5 GHz	12dBi	18 degrees	110 deg. (x4)	118mm/4.6"	458mm/18.0"
QSA225-14.5	2.0-2.5 GHz	14.5dBi	9 degrees	110 deg. (x4)	118mm/4.6"	900mm/35.4"
QSA250-12	2.3-2.7 GHz	12dBi	18 degrees	110 deg. (x4)	118mm/4.6"	860mm/33.9"
QSA250-14.5	2.3-2.7 GHz	14.5dBi	9 degrees	110 deg. (x4)	118mm/4.6"	438mm/17.2"
QSA470-12	4.4-5.0 GHz	12dBi	18 degrees	110 deg. (x4)	67mm/2.6"	241mm/9.5"
QSA675-12	6.4-7.1 GHz	12dBi	18 degrees	110 deg. (x4)	81mm/3.2"	241mm/9.5"

The above antennas are all available as either -RX (with 4 RF connectors)

or -TX (with 1 RF connector and DC control).



Base view, with bracket, showing TX Switchable option.



Base view, with bracket, showing RX Diversity option.

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