

2 - 18 GHz Dual Circularly Polarised Sinuous Antenna



Model Number QSPDCP2-18SRA

- Suitable for use in electronic surveillance, DF and reflector feeds with little phase centre variation with frequency
- Gain -6 to +1 dBiL across the band
- Low weight and small size enhance usability
- A lensed radome is also included

The QSPDCP2-18SRA ultra wide band circularly dual polarised sinuous antenna is manufactured from aluminium and engineering composites. Its compact size, minimal beam squint and dual circular polarisation capability make it an attractive candidate for many air-borne and precision ground-based applications.

Radiation pattern beamwidths are closely matched between E & H planes and have remarkable stability versus frequency. This, and the small variation of phase centre, makes it an attractive candidate for feeds in reflector dishes.

A PTFE lensed radome is included to improve beam shape and gain.

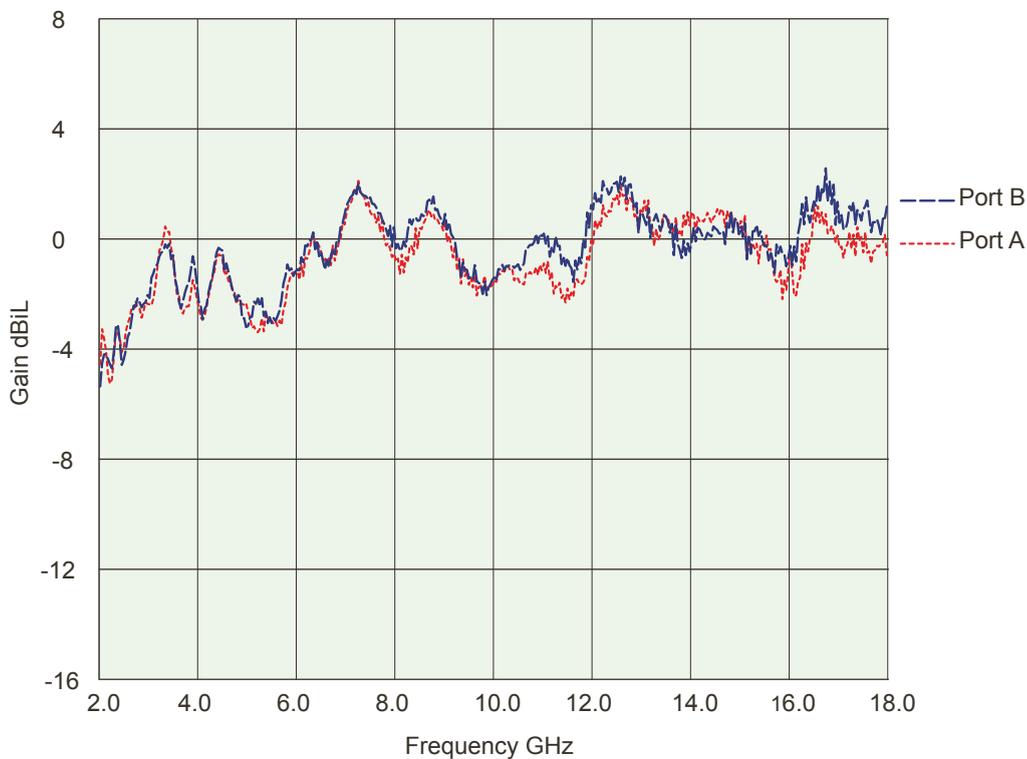
Other models available

QSPDCP0.7-4S	0.7 - 4 GHz Dual Circularly Polarised Sinuous Antenna
QSPDP0.2-2S	0.2 - 2 GHz Dual Linearly Polarised Sinuous Antenna
QSPDP2-18SRA	2 - 18 GHz Dual Linearly Polarised Sinuous Antenna

Typical Specification

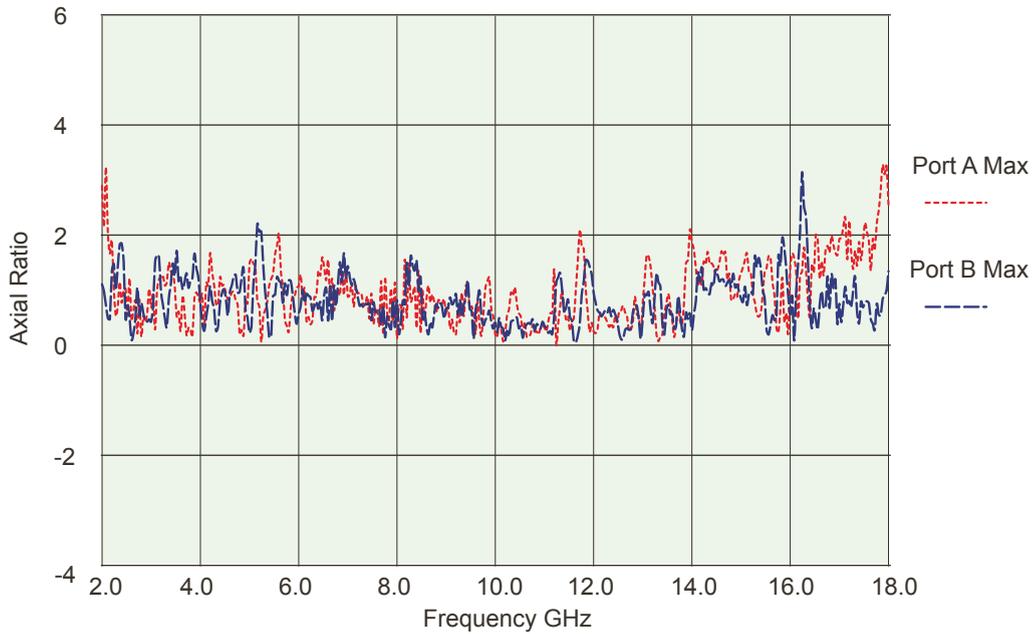
Frequency	2 - 18 GHz
Gain	-6 - +1 dBiL
3 dB Beamwidth	100° - 60°
6 dB Squint	≤ ±3° typical
VSWR	2 - 10 GHz, < 1.5:1 ; 10 - 18 GHz, < 2:1 both ports
Axial Ratio on Boresite	< 2 dB, 2 - 12 GHz; < 4 dB, 12 - 18 GHz
Weight	440g (Including radome)
Construction	Aluminium / Engineering Composites
Power Handling	nom. 2W, c.w.
Dimensions	65 mm Diameter x 108 mm Length (inclusive of connectors)
Connector Type	SMA
Mounting	Optional mounting flange 81 mm dia. or customer specified
Environmental	Customer Specified

Typical Gain



Data Sheet

Typical Axial Ratio



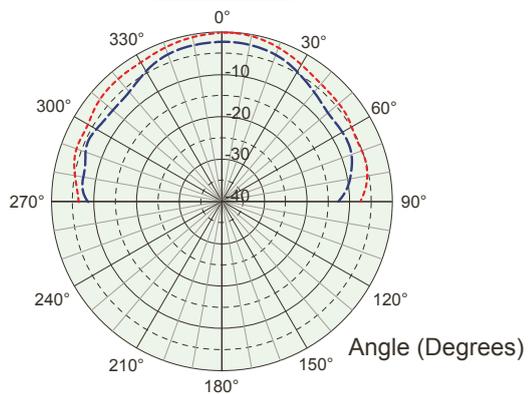
Typical Antenna Patterns

Key

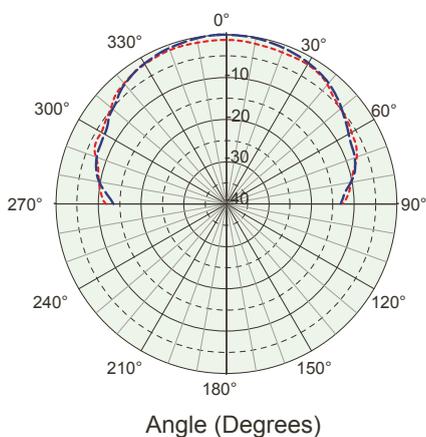


Notes: Horizontal & Vertical refers to polarisation of source antenna.
Antenna patterns are shown for an antenna with lensed radome & absorber placed around the flange.

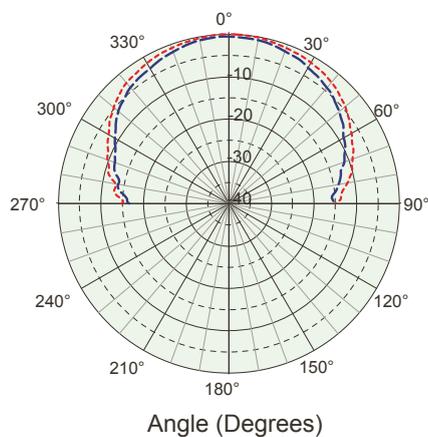
2 GHz



4 GHz

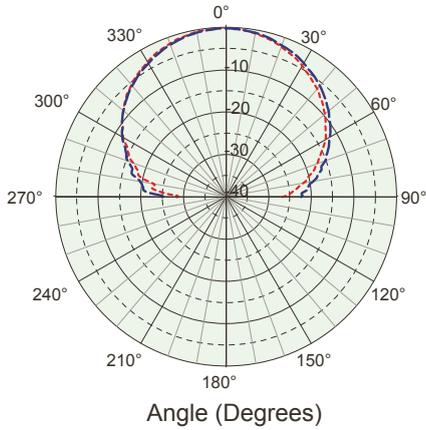


6 GHz

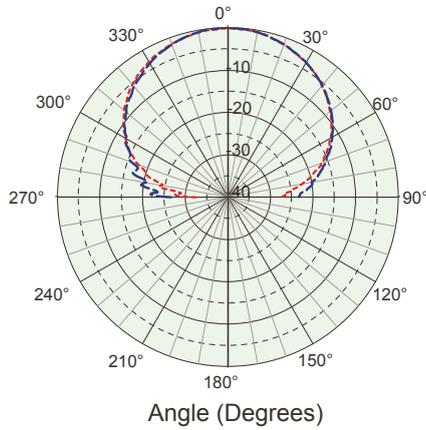


Typical Antenna Patterns

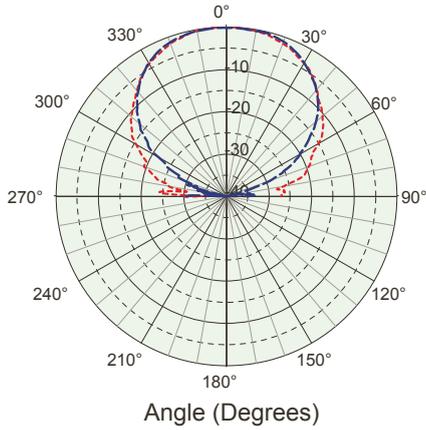
8 GHz



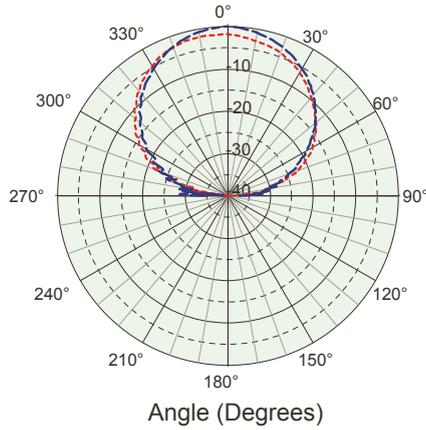
10 GHz



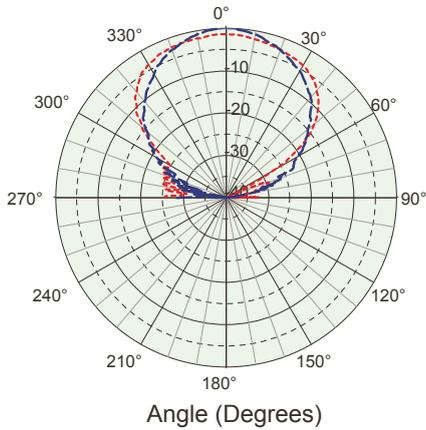
12 GHz



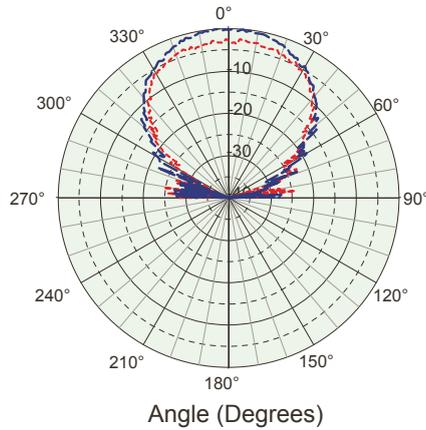
14 GHz



16 GHz



18 GHz



Designed and Manufactured in England to the Highest Standards

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