



SYMPHONY-SP™

WIDEBAND (617-6000MHz) DIRECTIONAL MIMO VENUE ANTENNA



- Flagship directional antenna for stadiums & high capacity venues
- Dual-port MIMO with dual-polarization and minimal sidelobes
- Continuous wideband coverage across all sub-6GHz cellular and WiFi bands; enabling 5G and future-proofing your system
- Fraction of the size of other solutions
- Tested and excelled in live stadium environment

APPLICATIONS

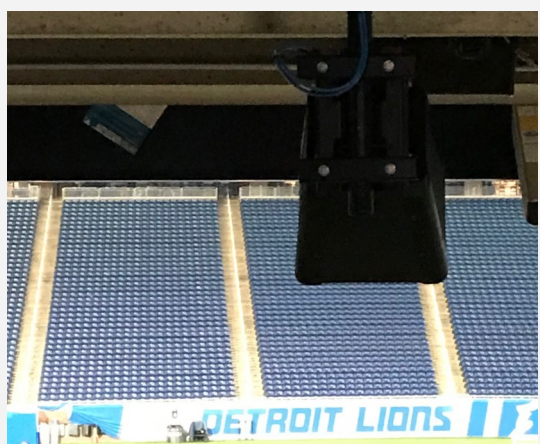
- Stadium and Venue DAS
- Single & Multi-Carrier Systems
- Microcells & Metrocells
- WiFi systems

THE FRACTAL ADVANTAGE™

- Super-wide bandwidth for essentially all frequency applications in single antenna
- “Future proof” design ready for LTE, 5G, CBRS, LAA, C-band
- Excellent RF performance with ultra-wide bandwidth
- Smallest form factor (both size and weight) for given performance on the market

FREQUENCY-DEPENDENT SPECIFICATIONS

Frequency (MHz)	617-806	806-896	1695-2200	2200-2700	3550-3700	3700-4200	5100-6000
Peak Gain (dBi)	9.6	9.0	13.8	14.7	12.1	13.7	12.8
Avg Gain (dBi)	8.4	8.3	12.9	13.5	11.6	11.7	12.1
Horizontal beamwidth	56	41	32	23	25	23	20
Vertical beamwidth	69	61	25	27	29	27	34
Avg VSWR	<2:1	<2:1	<2:1	<2:1	<2:1	<2:1	<2:1
Front-to-back (dB)	18	12	28	30	23	26	30
Max Power (per port)	25W						0.2W
Isolation (typ. dB)	25						
PIM, 3rd Order (dBc)	<-153				N/A		



OTHER SPECIFICATIONS

Unit Number	SYMSPV01
Impedance	50 Ω
Polarization	Dual +/-45
Antenna Weight	6 lbs (2.7 kg)
Antenna Height x Width	13" x 13"
Antenna Depth	15"
Input Connect.	2 X 4.3-10
Operating Temp.	-40°F to 130°F
Radome Material	Kydex, UL94 V-0 rating
Color	White or Black (Custom color available upon request)

FOR INQUIRES, CONTACT US AT SALES@FRACTENNA.COM

Applicable Fractal Antenna Systems Patents: 7,145,513; 9,482,474; and Patents Pending

Address: 213 Burlington Road, Bedford, MA, USA; Phone: 781-275-2300

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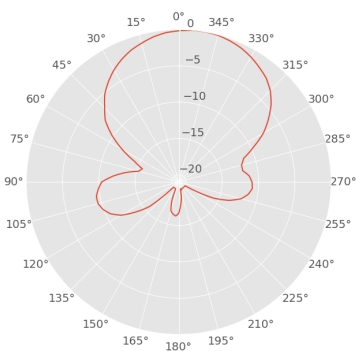
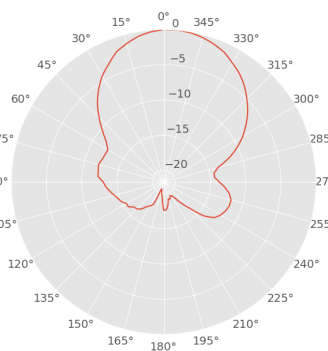
All specifications are subject to change at any time without notice

ANTENNA POWER PATTERNS FOR COMMON FREQUENCIES

672 MHz

HORIZONTAL PLANE (dBi)

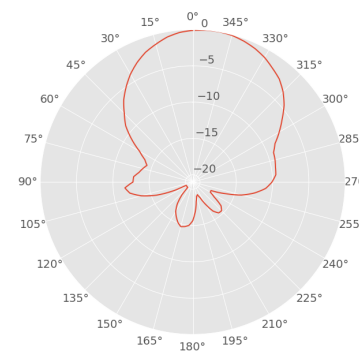
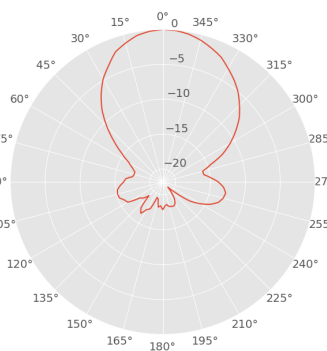
VERTICAL PLANE (dBi)



737 MHz

HORIZONTAL PLANE (dBi)

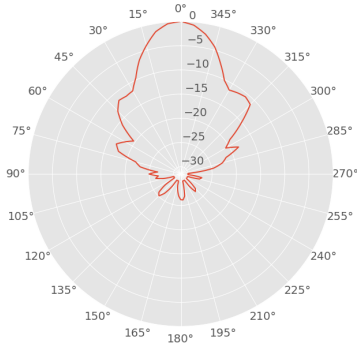
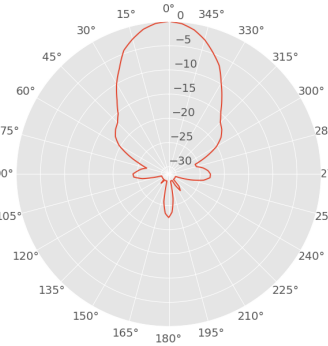
VERTICAL PLANE (dBi)



1734 MHz

HORIZONTAL PLANE (dBi)

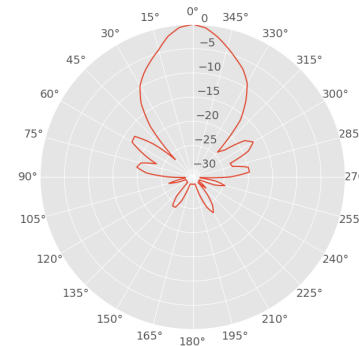
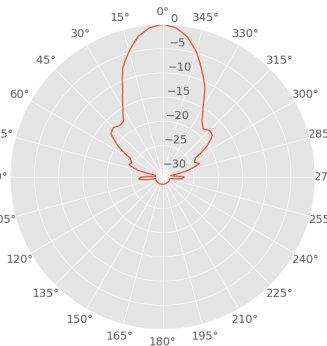
VERTICAL PLANE (dBi)



2112 MHz

HORIZONTAL PLANE (dBi)

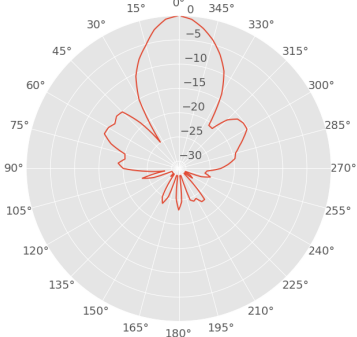
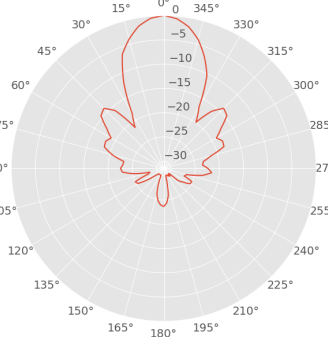
VERTICAL PLANE (dBi)



2355 MHz

HORIZONTAL PLANE (dBi)

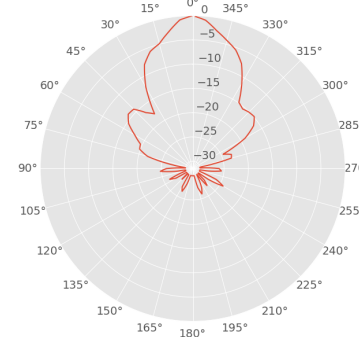
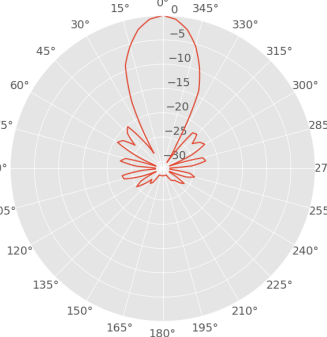
VERTICAL PLANE (dBi)



2544 MHz

HORIZONTAL PLANE (dBi)

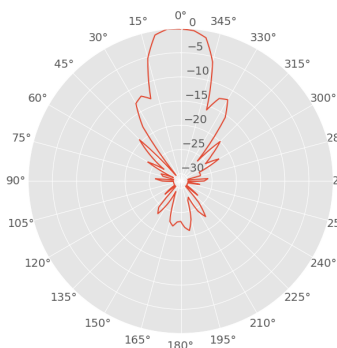
VERTICAL PLANE (dBi)



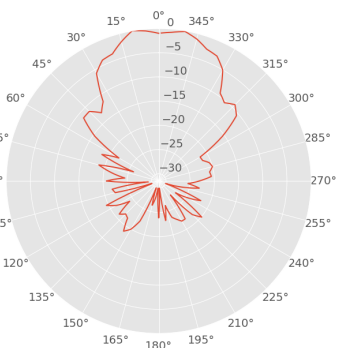
ANTENNA POWER PATTERNS FOR COMMON FREQUENCIES

3624 MHz

HORIZONTAL PLANE (DBI)

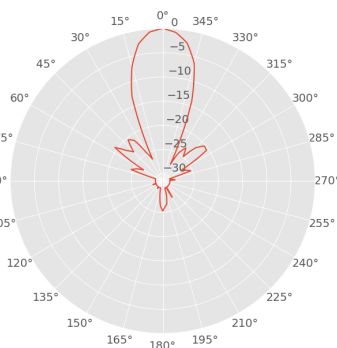


VERTICAL PLANE (DBI)

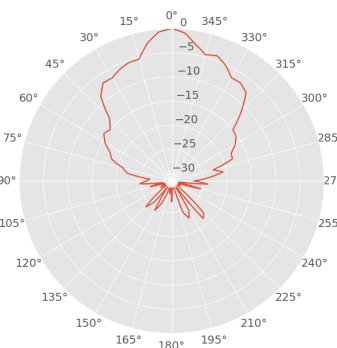


4029 MHz

HORIZONTAL PLANE (DBI)

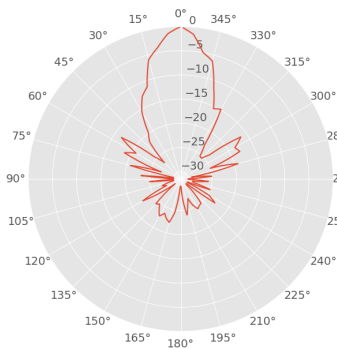


VERTICAL PLANE (DBI)

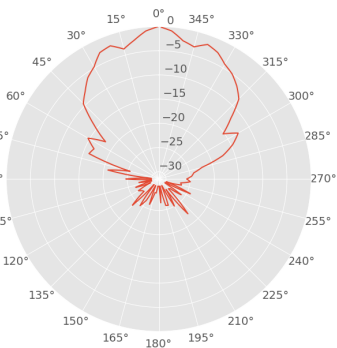


5244 MHz

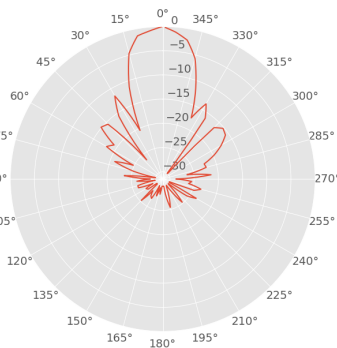
HORIZONTAL PLANE (DBI)



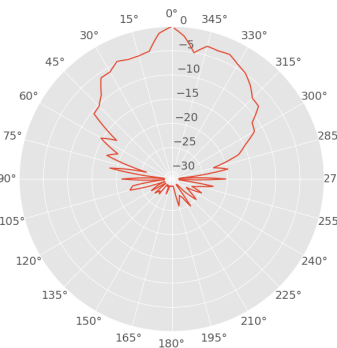
VERTICAL PLANE (DBI)



HORIZONTAL PLANE (DBI)



VERTICAL PLANE (DBI)



ORDERING INFORMATION

Antenna part number

SYMSPV01

Simulation files

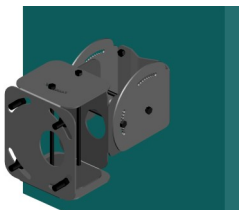
Contact us at sales@fractenna.com for VEX file

Color options

Custom color available upon request—may be subject to additional lead time

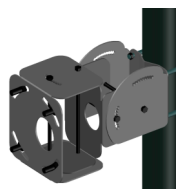
Mounting bracket

WALL MOUNT



AND

POLE MOUNT



*Additional mount
information on
next page*

MOUNTING BRACKET COMPONENTS

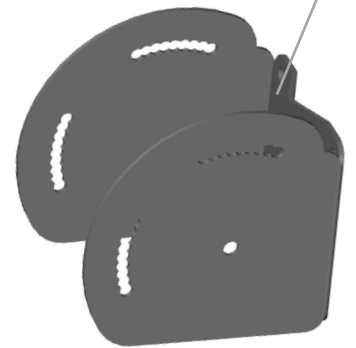
1. ANTENNA MOUNT



2. ROTATION INSERT



3. WALL/POLE MOUNT

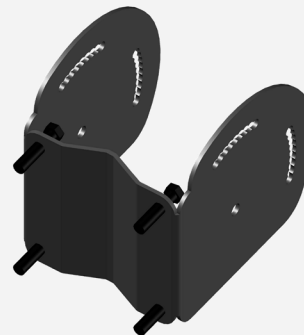


ANTENNA MOUNTING



- ◇ MOUNT ANTENNA BACK PLATE TO MOUNT COMPONENT 1.
- ◇ ROTATE ANTENNA TO PREFERRED MOUNT POSITION AND TIGHTEN BOLTS

MOUNTING TO WALL/POLE



- ◇ COMPONENT 3 ENABLES BOTH POLE AND WALL MOUNTING APPLICATIONS
- ◇ USE STRAIGHT BOLTS FOR WALL MOUNTING
- ◇ OR U-BOLTS TO MOUNT TO POLE (2-4" DIAMETER)

MOUNTING BRACKET INFORMATION

Mount part number	SYMSPMB01
Material	1/8" Carbon steel
Hardware	Included with mount
Color	Black
Mounting style	Pole Mount (fits 2"-4" OD) or Wall Mount
Dimensions (full assembly)	H: 7.5" ; W: 6.5" ; L: 12"
Tilt	Vertical: +/- 30° ; Horizontal: +/- 60°
Rotation	+/- 25°