

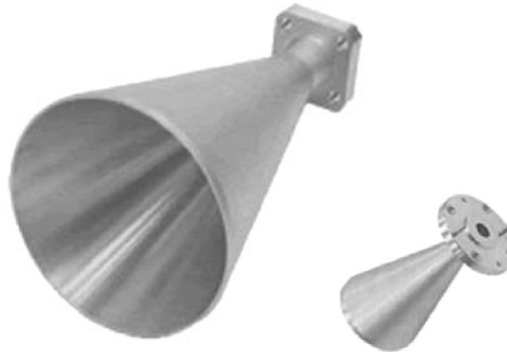
## Conical Horn Antennas, SAC Series

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### FEATURES:

- ◆ Frequency coverage: 8.2 to 170 GHz
- ◆ Rectangular and circular waveguide interfaces
- ◆ Precise machined or
- ◆ Low VSWR



### APPLICATIONS:

- ◆ Antenna ranges
- ◆ Feed horns
- ◆ Rapid system setups
- ◆ Engineering setups

### DESCRIPTION:

**SAC series** conical gain horns are offered in both standard and custom build models with either circular or rectangular waveguide interfaces. While the conical gain horns with rectangular waveguide interface only support linear polarization, the models with circular waveguide interface support various polarization diversities including horizontal, vertical, left and right-handed circular polarizations for broader category applications.

The standard models offer 23 dB nominal gain, 9 degrees half power beamwidth, 15 dB typical sidelobe level and 1.2:1 VSWR at center frequency of the band and cover the frequency range of 8.2 to 170 GHz. In addition to the standard models listed, other frequency or gain value are available as custom models.

### CATALOG MODELS:

Band	Model Number	Frequency Range (GHz)	Gain (dB)	Outline	Band	Model Number	Frequency Range (GHz)	Gain (dB)	Outline
X	SAC-2309-938-S2	8.5 to 11.6	23	AC-CX2	X	SAC-2309-90-S2	8.5 to 11.6	23	AC-RX2
Ku	SAC-2309-594-S2	13.4 to 18.0	23	AC-C62	Ku	SAC-2309-62-S2	13.4 to 18.0	23	AC-R62
K	SAC-2309-396-S2	20.0 to 24.5	23	AC-CK2	K	SAC-2309-42-S2	20.0 to 24.5	23	AC-RK2
Ka	SAC-2309-250-S2	33.0 to 38.5	23	AC-CA2	Ka	SAC-2309-28-S2	33.0 to 38.5	23	AC-RA2
Q	SAC-2309-219-S2	38.5 to 43.0	23	AC-CQ2	Q	SAC-2309-22-S2	38.5 to 43.0	23	AC-RQ2
U	SAC-2309-188-S2	43.0 to 50.0	23	AC-CU2	U	SAC-2309-19-S2	43.0 to 50.0	23	AC-RU2
V	SAC-2309-141-S2	58.0 to 68.0	23	AC-CV2	V	SAC-2309-15-S2	58.0 to 68.0	23	AC-RV2
E	SAC-2309-125-S2	66.0 to 88.0	23	AC-CE2	E	SAC-2309-12-S2	66.0 to 88.0	23	AC-RE2
W	SAC-2309-094-S2	88.0 to 110	23	AC-CW2	W	SAC-2309-10-S2	88.0 to 110	23	AC-RW2
F	SAC-2309-075-S2	115 to 140	23	AC-CF2	F	SAC-2309-08-S2	115 to 140	23	AC-RF2
D	SAC-2309-059-S2	140 to 160	23	AC-CD2	D	SAC-2309-06-S2	140 to 160	23	AC-RD2

### CUSTOM DESIGNED MODELS:

**SAGE Millimeter's** conical gain horn model numbers are configured per following format. Customers may refer to the format and specify their own model numbers accordingly when placing the order.

**SAC - GG BW - DDD - XY OR SAC - GG BW - WG - XY**

**GG** is the linear gain in dB. For example: 25 dB = 25

**BW** is the 3dB beamwidth in degrees. For example: 12 degrees = 12

**DDD** is the diameter of the input connector in mils for circular waveguide or **WG** is the waveguide designator for rectangular waveguide

**X** is for antenna type. "S" is for standard and "C" is for custom designed.

**Y** is for factory reserve.

Example: SAC-2112-28-C1 is a custom designed conical gain horn with frequency range of 33.0 to 38.5 GHz, gain 21 dB and 3 dB beamwidth 12 degrees. The input connector is WR-28 waveguides. "1" is a factory assigned sequential number.