



STANDARD GAIN HORNS 390-SG SERIES

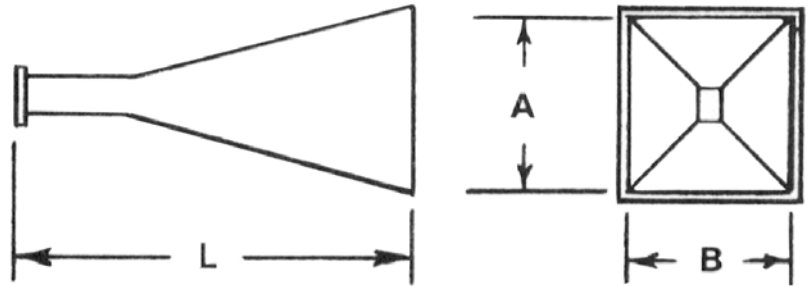
DATA
SHEET
No. T81A

- > FULL WAVEGUIDE BAND
- RUGGED & LIGHTWEIGHT
- GAIN CURVES SUPPLIED



DESCRIPTION

MEC's 3900SG Series of Standard Gain Horns are those sizes established in NRL Report No. 4433.¹ They are suitable for calibration of other antennas, as receiving or transmitting antennas and pick-up horns for field sampling. A calibration curve is provided with each unit, calculated per the theory established and used by NRL.² Material is aluminum with chromate conversion per MIL-C-5541, Class 3, and gray epoxy enamel.



SPECIFICATIONS

MODEL	FREQUENCY (GHz)	WAVEGUIDE SIZE	3dB BEAMWIDTH		NOMINAL GAIN (dB)	FLANGE EQUIVALENT TO	DIMENSIONS (INCHES)		
			E	H			L	A	B
LA390-SG	1.6 – 2.6	WR430	28°	25°	16	UG-437B/U	12.0	14.51	10.75
S390-SG	2.5 – 4.0	WR284	22°	20°	18	UG-584/U	15.0	12.76	9.45
G390-SG	3.7 – 6.0	WR187	22°	20°	18	UG-407/U	11.0	8.51	6.30
J390-SG	5.0 – 8.2	WR137	14°	13°	22	UG-441/U	18.0	11.36	8.42
X390-SG	7.5 – 12.5	WR90	14°	13°	22	UG135/U	13.0	7.65	5.67
P390-SG	11.0 – 18.0	WR62	10°	9°	24	UG-1665/U	14.0	5.98	4.91
K390-SG	16.5 – 26.5	WR42	10°	9°	24	UG-597/U	9.0	4.00	3.28
A390-SG	25.0 – 40.0	WR28	10°	9°	24	UG-599/U*	6.5	2.72	2.23

*Aluminum

ORDERING INFORMATION

Other sizes, configurations and flanges are available on request. MEC has extensive facilities to satisfy unique customer requirements.

Notes:

1. Also published in "Electronics" July 1955 pp 150-157 by W.T. Slayton
2. E.H. Braun. "Some Data For The Design of Electromagnetic Horns," IRE Transactions on Antennas and Propagation, vol. AP-4, no. 1, pp 29-31, Jan. 1956.