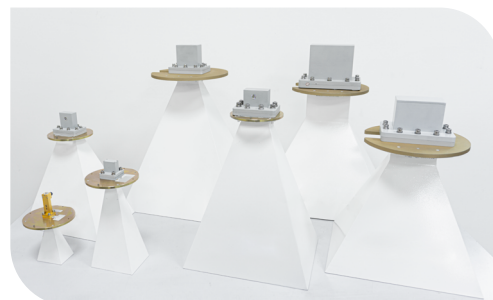


Standard Gain Horn antennas



THE SGH FAMILY OFFERS HIGH GAIN, LOW CROSS POLARIZATION AND SYMMETRICAL RADIATION PATTERNS THAT MAKE IT EXCELLENT FOR REFERENCE ANTENNAS TESTING



Overview

Standard Gain Horns are based on pyramidal waveguide horns. High accuracy design and superior precision manufacturing enable a symmetrical radiation pattern with very low cross discrimination (typically below 40 dB) and VSWR.

A robust design allows SGHs to be scaled to any frequency range (500 MHz to 60 GHz in standard octave bandwidth) with reliable performance.

Horns are provided with integrated waveguide-to-coax adapters with SMA or K connectors up to 40 GHz and in standard rectangular waveguide flange output from 40 GHz.

Standard gain horns have wideband operation, covering all standard waveguide bands.

Each unit is individually hand tuned to guarantee robust performance. All units can be fully characterized in an anechoic chamber delivered with a detailed antenna calibration report (option).

High precision mounting interfaces with levels and absorber collar customized for each horn for anechoic chamber applications are available as an option.

KEY FEATURES

- * Linear polarization
- * Symmetric radiation patterns
- * Low cross polarization
- * Low VSWR
- * High and stable gain with frequency
- * Superior precision design
- * High precision manufacturing
- * Light weight for easy handling
- * High reliability coaxial connector
- * Treatment and painted

OPTIONS

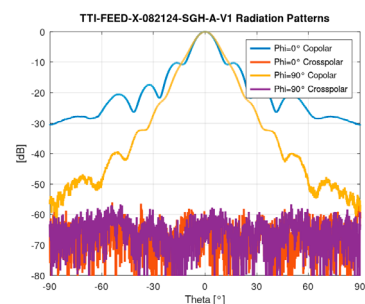
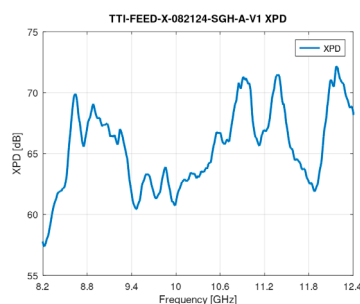
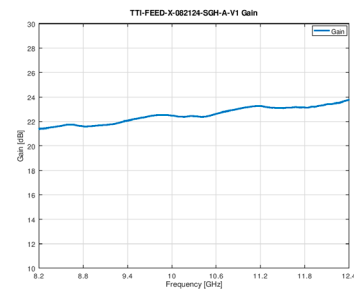
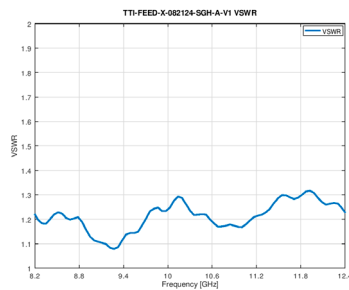
- * Detailed calibration report
- * Absorber collar
- * Custom mounting interface
- * Storage case

Applications

- * Antenna test range reference gain antennas
- * Far-field antenna test range sources
- * Linearly-polarized standards for polarization and channel balance calibration of Near-Field probes

PRODUCT CODE	WG band	Freq. range [GHz]	VSWR	Gain ¹ [dBi]	Crosspolar discrimination ² [dB]		RF interface
					Target	Typical	
TTI-FEED-UHF-005007-SGH-A	WR-1500	0.5 - 0.75	< 1.4:1	11.0 ± 0.5	> 40	> 35	SMA (f) - N (f)
TTI-FEED-UHF-007011-SGH-A	WR-975	0.75 - 1.10	< 1.4:1	14.0 ± 0.5	> 40	> 35	SMA (f) - N (f)
TTI-FEED-UHF-009015-SGH-A	WR-770	0.96 - 1.50	< 1.4:1	14.0 ± 0.5	> 40	> 35	7/16 (f) - N (f)
TTI-FEED-L-011017-SGH-A	WR-650	1.10 - 1.70	< 1.4:1	14.0 ± 0.5	> 40	> 35	SMA (f) - N (f)
TTI-FEED-R-017026-SGH-A	WR-430	1.70 - 2.60	< 1.4:1	17.0 ± 0.5	> 40	> 35	SMA (f)
TTI-FEED-D-022033-SGH-A	WR-340	2.20 - 3.30	< 1.4:1	17.0 ± 0.5	> 40	> 35	SMA (f)
TTI-FEED-S-026039-SGH-A	WR-284	2.60 - 3.95	< 1.4:1	17.0 ± 0.5	> 40	> 35	SMA (f)
TTI-FEED-E-033049-SGH-A	WR-229	3.30 - 4.90	< 1.4:1	17.0 ± 0.5	> 40	> 35	7/16 (f) - N (f)
TTI-FEED-G-039058-SGH-A	WR-187	3.95 - 5.85	< 1.4:1	20.0 ± 0.5	> 40	> 35	SMA (f)
TTI-FEED-C-058082-SGH-A	WR-137	5.85 - 8.20	< 1.4:1	20.0 ± 0.5	> 40	> 35	SMA (f)
TTI-FEED-C-059084-SGH-A	-	5.90 - 8.40	< 1.4:1	20.0 ± 0.5	> 40	> 35	SMA (f)
TTI-FEED-H-070100-SGH-A	WR-112	7.05 - 10.00	< 1.4:1	23.0 ± 0.5	> 40	> 35	SMA (f)
TTI-FEED-X-082124-SGH-A	WR-90	8.20 - 12.40	< 1.4:1	23.0 ± 0.5	> 40	> 35	SMA (f)
TTI-FEED-XKu-100150-SGH-A	WR-75	10.00 - 15.00	< 1.4:1	23.0 ± 0.5	> 40	> 35	SMA (f)
TTI-FEED-Ku-124180-SGH-A	WR-62	12.40 - 18.00	< 1.4:1	23.0 ± 0.5	> 40	> 35	SMA (f)
TTI-FEED-K-180265-SGH-A	WR-42	18.00 - 26.50	< 1.4:1	23.0 ± 0.5	> 40	> 35	SMA (f)
TTI-FEED-KKa-220330-SGH-A	WR-34	22.00 - 33.00	< 1.4:1	23.0 ± 0.5	> 40	> 35	K (f)
TTI-FEED-Ka-265400-SGH-A	WR-28	26.50 - 40.00	< 1.4:1	23.0 ± 0.5	> 40	> 35	K (f)
TTI-FEED-Q-330500-SGH-A	WR-22	33.00 - 50.00	< 1.4:1	23.0 ± 0.5	> 40	> 35	1.85 mm (f)-UG-383/U-M flange
TTI-FEED-U-400600-SGH-A	WR-19	40.00 - 60.00	< 1.4:1	23.0 ± 0.5 20.0 ± 0.5	> 40	> 35	1.85 mm (f)-UG-383/U-M flange

 Typical measured data



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Information contained in this document is subject to change without notice.

Custom frequency bands are available upon request.