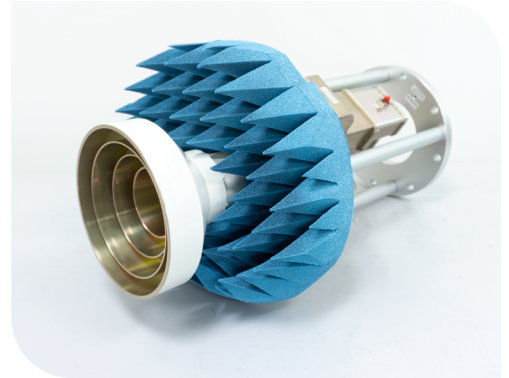


Dual Linear Polarized Horn Antennas



USING AN ORTHOMODE TRANSDUCER AND AXIAL CORRUGATED HORN, THE DLPHA FAMILY OFFERS DUAL POLARIZATION, ROTATIONALLY SYMMETRIC RADIATION PATTERNS AND VERY LOW CROSS-POLARIZATION



Overview

Dual-Linear Polarized Horn Antennas are based on cylindrical waveguide horns, with several axial choke corrugations (standard corrugated cylindrical horns are also available upon request). As a result of an optimised design and high-precision manufacturing, horns possess rotationally symmetric radiation patterns with low back radiation and very low cross-polarisation.

From 3.3 GHz, horns are provided with integrated ortho-mode transducers (OMT) with very low cross-coupling with SMA or K connectors up to 40 GHz and in standard rectangular waveguide flange outputs from 40 GHz, one with vertical polarization and one with horizontal polarization.

Corrugated cylindrical horns have wideband operation, covering all standard waveguide bands. High precision mounting interfaces with levels and absorber collars customized for each horn for anechoic chamber applications and detailed calibration report (option).



KEY FEATURES

- * Dual polarization
- * Rotationally symmetric radiation patterns
- * Low cross polarization
- * Low VSWR
- * High precision design
- * High precision manufacturing

OPTIONS

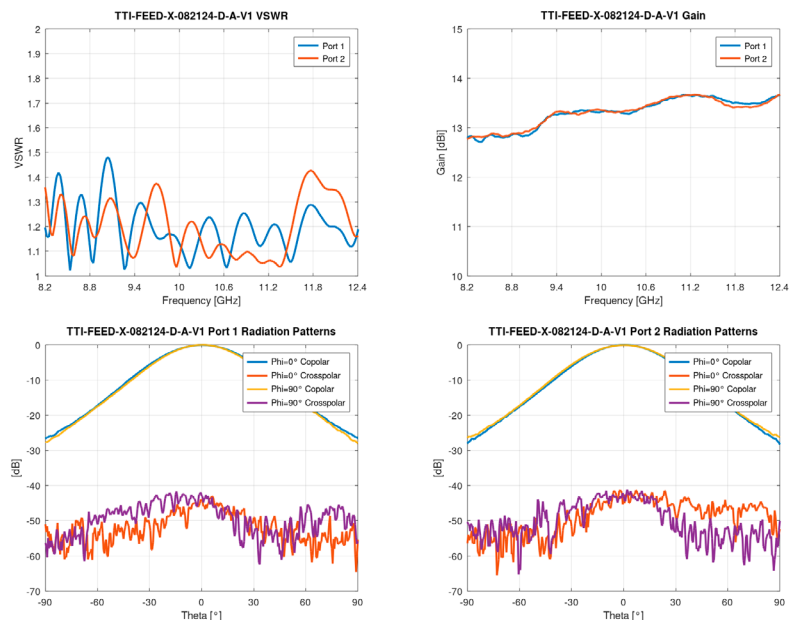
- * Detailed calibration report
- * Absorber collar
- * Custom mounting interface
- * Storage case

Applications

- * Satellite communications
- * Radioastronomy
- * Point to point datalinks
- * Wireless
- * Compact antenna test range feeds
- * Spherical near-field antenna test
- * Far-field antenna test range sources

PRODUCT CODE	WG band	Freq. range [GHz]	VSWR	Cross-talk between ports [dB]		Gain ¹ [dBi]	Crosspolar discrimination ² [dB]		RF interface
				Target	Typical		Target	Typical	
TTI-FEED-UHF-005008-D-A	-	0.55 - 0.89	< 1.6:1	> 40	> 35	11.5 ± 0.5	> 40	> 35	SMA (f)
TTI-FEED-UHF-007011-D-A	WR-975	0.75 - 1.10	< 1.6:1	> 40	> 35	11.5 ± 0.5	> 40	> 35	SMA (f)
TTI-FEED-L-011017-D-A	WR-650	1.10 - 1.70	< 1.6:1	> 40	> 35	11.5 ± 0.5	> 40	> 35	SMA (f)
TTI-FEED-LR-014022-D-A	WR-510	1.40 - 2.20	< 1.6:1	> 40	> 35	11.5 ± 0.5	> 40	> 35	SMA (f)
TTI-FEED-R-017026-D-A	WR-430	1.70 - 2.60	< 1.6:1	> 40	> 35	11.5 ± 0.5	> 40	> 35	SMA (f)
TTI-FEED-D-022033-D-A	WR-340	2.20 - 3.30	< 1.5:1	> 45	> 40	11.5 ± 0.5	> 45	> 40	SMA (f)
TTI-FEED-S-026039-D-A	WR-284	2.60 - 3.95	< 1.5:1	> 45	> 40	13.0 ± 0.5	> 45	> 40	SMA (f)
TTI-FEED-E-033050-D-A	WR-229	3.30 - 5.00	< 1.5:1	> 45	> 40	13.0 ± 0.5	> 45	> 40	SMA (f)
TTI-FEED-G-039058-D-A	WR-187	3.95 - 5.85	< 1.5:1	> 45	> 40	13.0 ± 0.5	> 45	> 40	SMA (f)
TTI-FEED-C-058082-D-A	WR-137	5.85 - 8.20	< 1.5:1	> 45	> 40	13.0 ± 0.5	> 45	> 40	SMA (f)
TTI-FEED-C-059085-D-A	-	5.90 - 8.50	< 1.5:1	> 45	> 40	13.0 ± 0.5	> 45	> 40	SMA (f)
TTI-FEED-H-070100-D-A	WR-112	7.05 - 10.00	< 1.5:1	> 45	> 40	13.0 ± 0.5	> 45	> 40	SMA (f)
TTI-FEED-X-082124-D-A	WR-90	8.20 - 12.40	< 1.5:1	> 45	> 40	13.0 ± 0.5	> 45	> 40	SMA (f)
TTI-FEED-XKu-100150-D-A	WR-75	10.00 - 15.00	< 1.5:1	> 45	> 40	13.0 ± 0.5	> 45	> 40	SMA (f)
TTI-FEED-Ku-124180-D-A	WR-62	12.40 - 18.00	< 1.5:1	> 45	> 40	13.0 ± 0.5	> 45	> 40	SMA (f)
TTI-FEED-KuK-170255-D-A	-	17.00 - 25.50	< 1.5:1	> 45	> 40	13.0 ± 0.5	> 45	> 40	SMA (f)
TTI-FEED-K-180265-D-A	WR-42	18.00 - 26.50	< 1.5:1	> 45	> 40	13.0 ± 0.5	> 45	> 40	SMA (f)
TTI-FEED-KKa-220330-D-A	WR-34	22.00 - 33.00	< 1.5:1	> 45	> 40	13.0 ± 0.5	> 40	> 35	K (f)
TTI-FEED-KKa-220330-D-B	WR-34	22.00 - 33.00	< 1.5:1	> 45	> 40	13.0 ± 0.5	> 40	> 35	K (f)
TTI-FEED-KKa-240380-D-A	-	24.00 - 38.00	< 1.5:1	> 45	> 40	13.0 ± 0.5	> 40	> 35	K (f)
TTI-FEED-Ka-265400-D-A	WR-28	26.50 - 40.00	< 1.5:1	> 40	> 35	13.0 ± 0.5	> 40	> 35	K (f)
TTI-FEED-Q-330500-D-A	WR-22	33.00 - 50.00	< 1.6:1 < 1.5:1	> 40	> 35	12.5 ± 0.5	> 40	> 35	2.4 mm (f) UG-383/U-M flange
TTI-FEED-U-400600-D-A	WR-19	40.00 - 60.00	< 1.6:1 < 1.5:1	> 40	> 35	12.5 ± 0.5	> 40	> 35	1.85 mm (f) UG-383/ U-M flange
TTI-FEED-V-500750-D-A	WR-15	50.00 - 75.00	< 1.5:1	> 40	> 35	12.5 ± 0.5	> 25	> 20	UG-385/U-M flange

 Typical measured data



 ttinorte.es
sales@ttinorte.com

Custom frequency bands are available upon request