



Dual Circular Cylindrical Horn

TTI-FEED-K α -300400-DC-A-V1

Dual Circular-Polarized Corrugated Cylindrical Horn (DC-CCH)

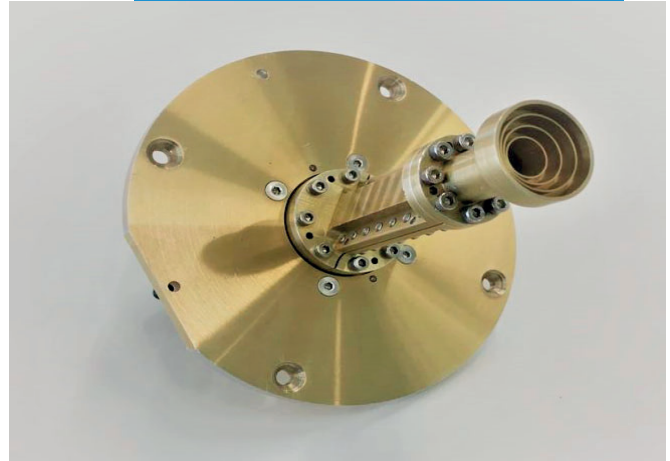
Overview

Dual circular-polarized corrugated cylindrical horns based on cylindrical waveguide horns, with several axial choke corrugations. Standard corrugated cylindrical horns are also available upon request. As a result of optimised design and high-precision manufacturing, horns possess rotationally symmetric radiation patterns with low back radiation and very low cross-polarisation.

TTI horns are provided with integrated polarizers and ortho-mode transducers 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 LHCP polarization and one with RHCP polarization.

Corrugated cylindrical horns are intended for wideband operation. Custom frequency bands are available upon request.

Each horn includes high precision customized mounting interfaces with levels and absorber plates. A detailed calibration report would be available upon request, critical for anechoic chamber applications.



Applications

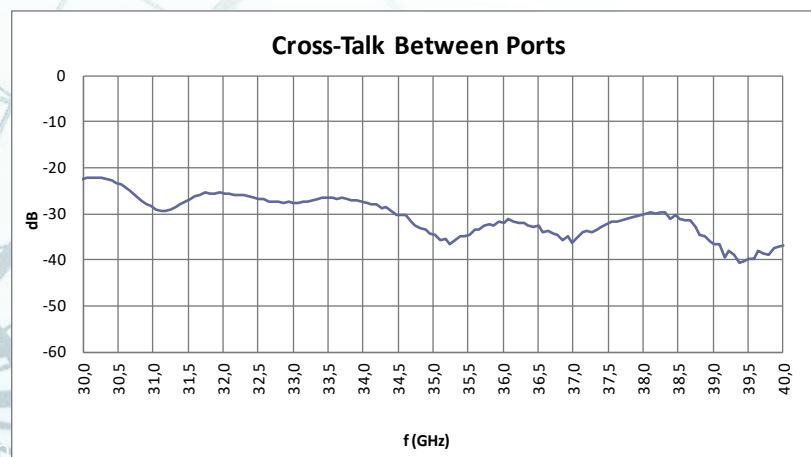
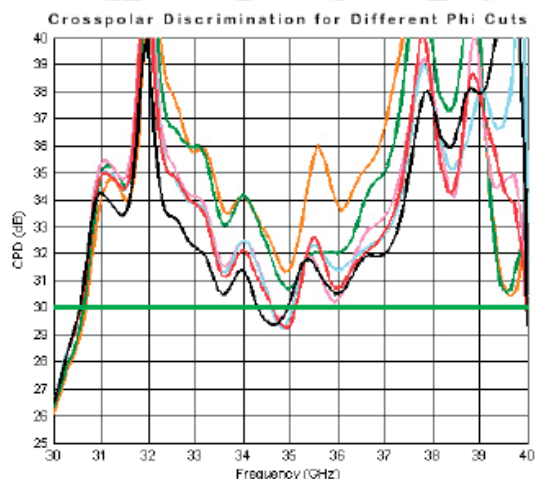
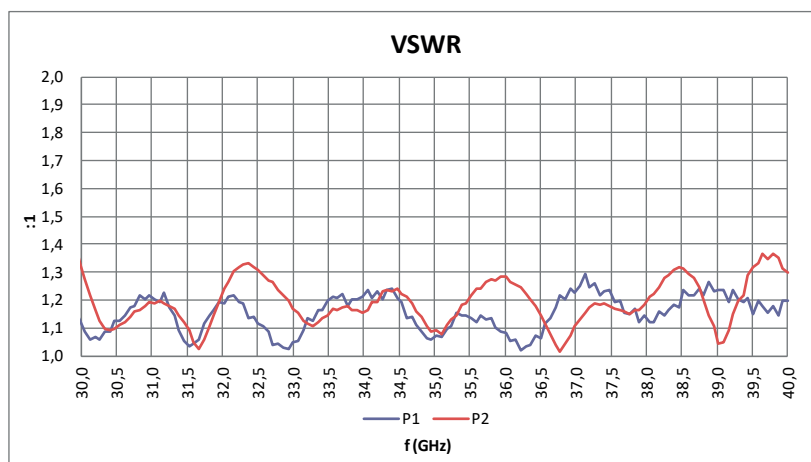
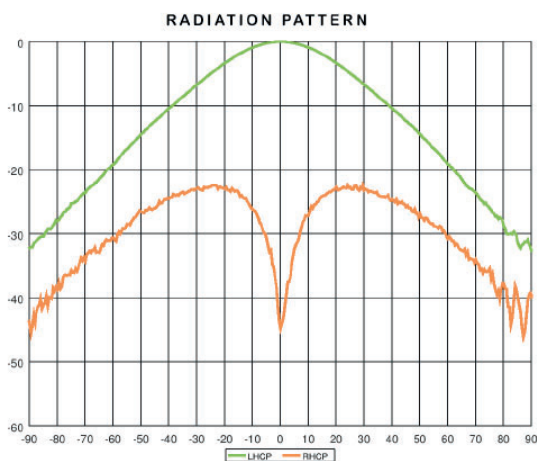
- Compact antenna test range feeds
- Spherical near-field antenna test range feeds
- Far-field antenna test range sources
- High efficiency dual polarization reflector feeds



TECHNICAL SPECIFICATIONS

Electrical

| | |
|---|----------------------|
| Frequency Range [GHz] | 30.0 – 40.0 GHz |
| VSWR | < 1.5:1 |
| Cross-Talk Between Ports [dB] | |
| Target | > 25 |
| Typical | > 22 |
| Gain [dBi] (At Center Frequency) | 13.0 ± 0.5 |
| Crosspolar Discrimination [dB] (At Boresight) | |
| Target | > 30 |
| Typical | > 26 |
| Input/Output | K (2.92mm) Connector |



Rev. 1 07/19

Albert Einstein 12
39011 Santander
Cantabria, Spain



Information contained in this document is subject to change without notice.
For more detailed information, please contact:

 comercial@ttinorte.es
 34 942 29 12 12
  www.ttinorte.es