

## Orthomode Transducers

### FEATURES:

- ❖ VSWR < 1.2
- ❖ Isolation > 30dB in Linear Mode
- ❖ Higher Frequency Units will be Quoted on Request
- ❖ Available from 18.0 to 110 GHz with 3% or Greater Bandwidth



**COT Series**

### DESCRIPTION:

Cernexwave's COT series orthomode transducer couples two orthogonal linearly polarized signals simultaneously while providing polarization isolation between transmit and receive.

### SPECIFICATIONS:

Waveguide Band	X	X/Ku	Ku	K	Ka	Q	U	V	E	W	F
Waveguide Size	WR - 90	WR - 75	WR - 62	WR- 42	WR- 28	WR- 22	WR- 19	WR- 15	WR- 12	WR- 10	WR - 8
Frequency Range (GHz)	8.2 to 12.4	10 to 15.0	12.4 to 18.0	18 to 26.5	26.5 to 40	33 to 50	40 to 60	50 to 75	60 to 90	75 to 110	90 to 140
% Bandwidth	±1 GHz	±1 GHz	±2 GHz	4%	4%	4%	3%	3%	3%	3%	3%
A	in	-	-	-	1.25	1.25	1.25	1.25	1.25	1.25	1.25
	mm	-	-	-	31.8	31.8	31.8	31.8	31.8	31.8	31.8
B	in	-	-	-	1.25	1.25	1.25	1.25	1.25	1.25	1.25
	mm	-	-	-	31.8	31.8	31.8	31.8	31.8	31.8	31.8
C	in	-	-	-	1.25	1.25	1.25	1.25	1.25	1.25	1.25
	mm	-	-	-	31.8	31.8	31.8	31.8	31.8	31.8	31.8

### HOW TO ORDER:

Specify Model Number

COT – LF HF IL IS -- XX

LF: Low End Frequency  
HF: High End Frequency

IL: Insertion Loss  
IS: Isolation  
XX: To be specified by the factory

**Example:** To order an orthomode transducer with circular waveguide size of WR-10, and a frequency band of 90-91GHz, with a Insertion loss of 0.8dBand Isolation of 30dB specify COT909108030-XX.

CERNEXWAVE RESERVE THE RIGHT TO CHANGE THE SPECIFICATIONS WITHOUT NOTICE