

## Finline Detectors (Waveguide and Coaxial)

### FEATURES:

- ❖ Coverage from 0.5-110GHz
- ❖ Full Waveguide Band
- ❖ High Video Sensitivity
- ❖ No Bias Voltage Required
- ❖ Planar Finline Construction
- ❖ Lightweight Compact Design



**CFD Series**

### DESCRIPTION:

Cernex's CFD series detectors convert incident RF energy into a DC voltage signal. The function of these detectors is similar to power sensors, with two exceptions. The CFD series detectors perform measurements more quickly and have a greater dynamic range than that obtainable from comparable power sensors. Ideally suited for rapid power measurements, these finline detectors are designed for a variety of instrumentation setups such as scalar analyzer applications. For low signal level measurement, the detectors provide significantly more sensitivity than that available from power sensors.

### SPECIFICATIONS:

Model No.	Frequency Range (GHz)	Frequency response (dB/octave)	VSWR (Max)	Sensitivity (mV/mW)	Case Type	Connector Type
CFDU11208T	0.1 - 12.4	≤ ± 1	1.7	800	HN2	SMA-F
CFDU11808T	0.1- 18	≤ ± 1	1.7	800	HN2	SMA-F
CFDU50810T	0.5 – 8	≤ ± 1	1.7	1000	HN2	SMA-F

OTHER FREQUENCIES AND SENSITIVITIES ARE ALSO AVAILABLE. PLEASE CONTACT CERNEX FOR MORE INFORMATION

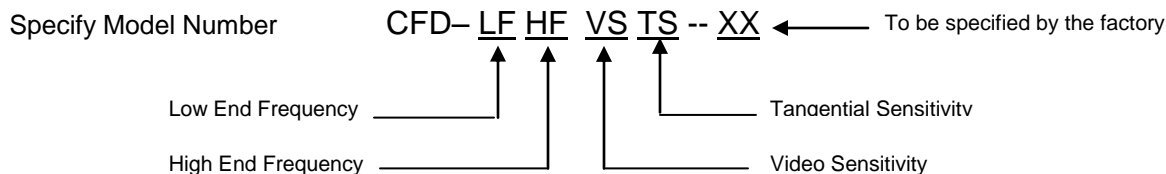
Waveguide Band	K	Ka	Q	U	V	E	W	
Waveguide Size	WR-42	WR-28	WR-22	WR-19	WR-15	WR-12	WR-10	WR-06
Frequency Range (GHz)	18 to 26.5	26.5 to 40	33 to 50	40 to 60	50 to 75	60 to 90	75 to 110	110-170
Video Sensitivity (mV/mW) Typ. Option # 1	800	800	700	600	450	400	200	200
Video Sensitivity (mV/mW) Typ. Option # 2	1300	1300	1200	1100	1000	900	800	
Tangential Sensitivity (dBm)	-55	-55	-50	-50	-50	-45	-45	-45
Flatness (dB)	±1.5	±1.5	±1.5	±1.5	±2.0	±2.0	±2.0	-

NOTE: HIGHER VIDEO SENSIVITY IS ALSO AVAILABLE



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## HOW TO ORDER:

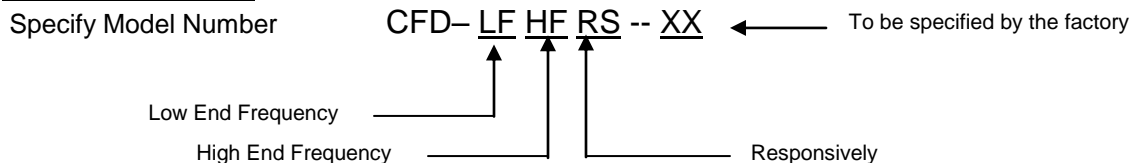


**Example:** To order WR-15 finline detector with a frequency band of 50-57 GHz, a video sensitivity of 450 mV, and a tangential sensitivity of -50, specify CFD-50574550-XX.

Waveguide Band						
Waveguide Size	WR-8	WR-6.5	WR-5.1	WR-3.4	WR-2.8	WR-2.2
Frequency Range (GHz)	90 to 140	110 to 170	140 to 220	220 to 330	260 to 400	330 to 500
Responsivity (V/W) Typ.	2500	2000	2000	1500	1500	1250
Output Connectors	2.9mm-F	2.9mm-F	2.9mm-F	2.9mm-F	2.9mm-F	2.9mm-F

HIGHER FREQUENCIES ARE ALSO AVAILABLE

## HOW TO ORDER:



**Example:** To order WR-8 finline detector with a frequency band of 90-140 GHz, a Responsivity of 2500 V/W Typ, specify CFD-9014025-XX.

CERNEX RESERVE THE RIGHT TO CHANGE THE SPECIFICATIONS WITHOUT NOTICE