

Finline Detectors (Waveguide & Coaxial)

FEATURES

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

DESCRIPTION

Cernexwave's convert incident RF energy into a DC voltage signal. The function of these detectors is similar to power sensors, with two exceptions: our 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.



CFD SERIES DETECTORS

SPECIFICATIONS

WAVEGUIDE

Model #	Waveguide Type	Frequency Range (GHz)	Sensitivity (mV/mW) Typ. Option # 1	Responsivity (V/W)	Tangential Sensitivity (dBm)	Flatness (dB)	Output Connector
CFD182680	WR-42	18 - 26.5	800	--	-55	±1.5	--
CFD264080	WR-28	26.5 - 40	800	--	-55	±1.5	--
CFD335070	WR-22	33 - 50	700	--	-50	±1.5	--
CFD406060	WR-19	40 - 60	600	--	-50	±1.5	--
CFD507545	WR-15	50 - 75	450	--	-50	±2.0	--
CFD609040	WR-12	60 - 90	400	--	-45	±2.0	--
CFD7511020	WR-10	75 - 110	200	--	-45	±2.0	--
CFD9014025	WR-8	90 - 140	--	2500	--	--	2.9mm-F
CFD11017020	WR-06	110-170	200	--	-45	--	--
CFD14022020	WR-5.1	140 - 220	--	2000	--	--	2.9mm-F
CFD215335U1	WR-03	215-335	100	--	--	--	--
CFD22033015	WR-3.4	220 - 330	1500	1500	--	--	2.9mm-F
CFD26040015	WR-2.8	260 - 400	1500	1500	--	--	2.9mm-F
CFD33050012	WR-2.2	330 - 500	1250	1250	--	--	2.9mm-F



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COAXIAL

Model No.	Frequency Range (GHz)	Frequency Response (dB/octave)	VSWR (max)	Sensitivity (mV/mW)	Connector
CFDU11208T	0.1 - 12.4	$\leq \pm 1$	1.7	800	SMA-F
CFDU11808T	0.1- 18	$\leq \pm 1$	1.7	800	SMA-F
CFDU50810T	0.5 – 8	$\leq \pm 1$	1.7	1000	SMA-F

NOTE: HIGHER VIDEO SENSIVITIES IS ALSO AVAILABLE

HOW TO ORDER

Specify Model Number

COAXIAL:

CFD– LF HF VS TS -- XX

CFD: Finline Detector
LF: Low Frequency Range
HF; High Frequency Range
VS: Video Sensitivity
TS: Tangential Sensitivity

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

CFD– LF HF VS -- XX

CFD: Finline Detector
LF: Low Frequency Range
HF; High Frequency Range
VS: Video Sensitivity (can substitute Responsivity)

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.