



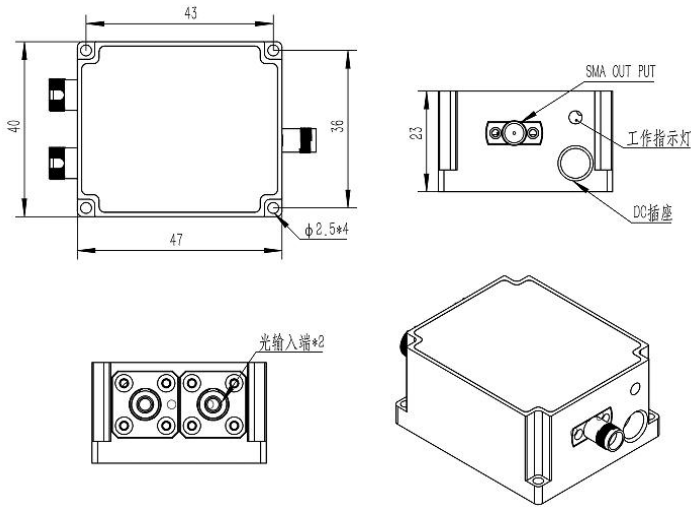
Mini high gain balanced optical detection module OCT system Balanced Photodetector (ROF-BPR-10M-B-FC)

The mini balanced detection module optimized for OCT systems in ophthalmology has high gain and low noise characteristics, high common-mode rejection ratio and high output voltage amplitude (~12V) through wavelength optimization. It has been used in batch applications in medical OCT devices, and the detector can also be optimized for 1310nm and 1550nm wavelengths.

Feature

- Typical wavelength: 850/1064/1310/1550nm
- 3dB bandwidth: 10MHz
- High common-mode rejection ratio: > 25dB
- High gain: $150 \times 10^3 \text{V/W}$

Model number	ROF-BPR-10M-A-FC-AC	ROF-BPR-10M-B-FC-AC
Spectral response range	850~1650nm	400~1100nm
Typical wavelength	1310nm/1550nm	850nm
responsivity	0.95A/W@1550nm	0.5A/W@850nm
3dB bandwidth	10K-10MHz	10K-10MHz
Common-mode rejection ratio CMRR	>25dB	>25dB
Gain @RF output	$300 \times 10^3 \text{V/W}$	$150 \times 10^3 \text{V/W}$
Noise voltage (RMS)	$< 15 \text{mV}_{\text{RMS}}$	$< 15 \text{mV}_{\text{RMS}}$
Saturated Optical Power (CW)	60 μ W	110 μ W
Maximum output amplitude	12Vpp	12Vpp
Damaged optical power	10mW	
Operating temperature range	-20~+70 °C	
Operating voltage	DC 12V	
Working current	40mA	
Input connector	FC	
Output connector	SMA	
Output impedance	50 ohms	
Output coupling mode	AC coupling (DC optional)	
Overall dimensions (mm)	47mm×40mm×23mm	



Ordering information

ROF	XXX	XX	X	XX	XX	X
	BPR-- Fixed gain balanced detector GBPR-- Gain adjustable balance detector	-3dB bandwidth: 10M---10MHz 80M---80MHz 200M---200MHz 350M---350MHz 400M---400MHz 1G---1GHz 1.6G---1.6GHz	Operating wavelength: A---850~1650nm (1550nm test) B---320~1000nm (850nm test) A1---900~1400nm (1064nm test) A2---1200~1700nm (1310nm or 1550nm test)	Input type: FC---Fiber coupling FS---Free space	Coupling type: DC---DC Coupling AC---AC Coupling	Gain type: Null-- Normal gain H--High gain requirement

Note:

1, 10 M, 80MHz, 200MHz, 350MHz and 400 MHz bandwidth detectors support operating bands A and B; Coupling Type Both AC and DC coupling are optional.

2, 1GHz, 1.6GHz, support working bands A1 and A2; Coupling type Only AC coupling is supported.

3, the gain is adjustable (150MHz) to support the working band A and B; Coupling Type Both AC and DC coupling are optional.

4, example, ROF-BPR-350M-A-FC-AC: 350MHz fixed gain balanced probe module, operating wavelength 1550nm(850-1650nm), AC coupled output.