

Optical Power Monitors

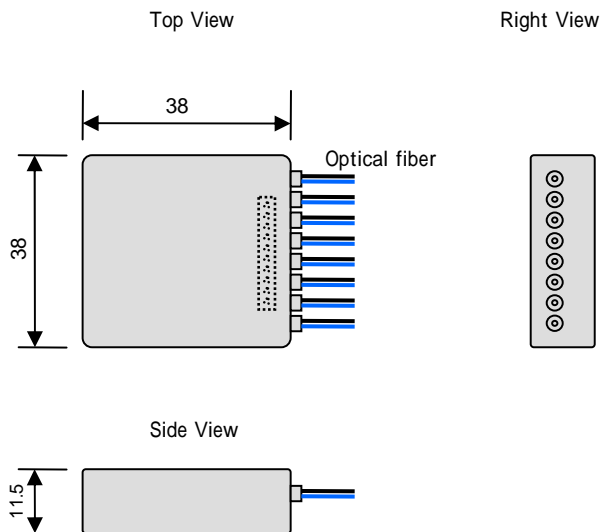
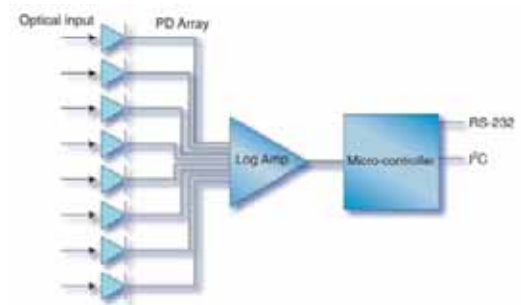
IPM- 8

Santec's IPM-8 is an integrated tap-monitor and high dynamic range log-amplifier module for any DWDM application. This device detects optical signal, and calculates to absolute optical power using a calibration data. The optical power data can be accessed from electrical communication interface.



Features

- Small package
- Good accuracy
- Wide dynamic range
- I²C and RS-232C interface



Pin#	Name	Comment
1	POWER_A	DC 5V supply (for analog circuit)
2	AGND	DC GND (for analog circuit)
3	POWER_D	DC 5V supply (for digital circuit)
4	DGND	DC GND (for digital circuit)
5	TX	RS-232C
6	RX	RS-232C
7	DGND	DC GND (RS-232/ I ² C)
8	SCL	I ² C Clock
9	SDA	I ² C Data In
10	RESET	N/W Reset

Specifications

Parameter	Unit	Tap ratio		Comments	
		2%	10%		
Channel number	-	8			
Wavelength range	THz (nm)	196.40 to 191.30 (1526.44 to 1567.13)		L-band is available	
Maximum Insertion loss	dB	0.5	0.8	Dependent built-in IPD's tap ratio	
Polarization dependent loss	dB	0.1			
Power accuracy	dB	-0.4	+0.4	@25	
	dB	-0.75	+0.75	All condition	
Operating optical input power	dBm	-17 to +20	-30 to +10		
Max. rating optical input power	dBm	+23	+20		
Operating temperature range		-5 to 70			
Supply Voltage (for analog)	V	5 +/- 0.25V		Max. current: 100mA	
Supply Voltage (for digital)	V	5 +/- 0.25V		Max. current: 200mA	
Max. Power consumption	W	1.6			
Interface	RS-232C	kbps	-	38.4	
	I ² C	kHz	-	400	Fast mode
Response time	RS-232C	ms	-	50	Excluding communication time
	I ² C	ms	-	7.5	Excluding communication time

Calibration condition

Wavelength	1550nm	Specified λ
Temperature	25	Room Temp.
Optical power	-	2 point calibration



SANTEC CORPORATION
5823 Ohkusa-Nenjoyozaka, Komaki, Aichi 485-0802, Japan Tel. +81-568-79-1959 Fax +81-568-79-1718

SANTEC U.S.A. CORPORATION
433 Hackensack Ave., Hackensack, NJ 07601, U.S.A. Toll Free +1-800-726-8321(santec-1) Tel. +1-201-488-5505 Fax +1-201-488-7702

SANTEC EUROPE LIMITED
Magdalen Centre, Robert Robinson Ave., The Oxford Science Park, Oxford OX4 4GA, U.K. Tel. +44-1865-784960 Fax +44-1865-784961

SANTEC (SHANGHAI) Co., Ltd.
No.800 Zhangyang Road Changhang Tower, Pudong District, Shanghai 200122 China Tel: +86-21-58361261, +86-21-58361262 Fax: +86-21-58361263