

iVOA-PD INTEGRATED OPTICAL VARIABLE ATTENUATOR ARRAY WITH POWER MONITORING

The iVOA™-PD products provide an integrated solution for 4 to 48 channel variable optical attenuator (VOA) array with tap/PD array for power monitoring. The product is based on Enablence's polymer planar lightwave circuit (PLC) technology and proven library of optical building blocks. The VOA devices are actuated by electrical power based on thermo-optics.



BENEFITS

- Hermetically packaged VOA
- Tap PD array
- Optical connectors
- Completed control PCB and firmware

FEATURES

- Variable attenuation
- Per-channel power monitoring
- Colorless ports (any C-band channel to any port)
- Variable channel count
- Small size
- Low power consumption
- Large dynamic range
- High reliability with hermetic packages and no moving parts
- Voltage control and simple electronic control circuit

APPLICATIONS

- Dynamic load balancing at add/drop nodes
- Channel and band balancing
- Dynamic gain equalization
- Dynamic attenuation at receivers

DATA SHEET

Parameter	Unit	iVOA1000D-PD	iVOA4000-PD
Number of Channels	ch	10	40
Operating Band	nm	1528-1610	1528-1610
Insertion Loss	dB	2.0	2.2
Tap Ratio	%	2	2
VOA Attenuation Range	dB	20	15
PDL	dB	0.7	0.5
TDL (-5 ~ +70 °C)	dB	0.5	0.5
Polarization Mode Dispersion (PMD)	ps	0.03	0.03
Chromatic Dispersion (CD)	ps/nm	0.3	0.3
Optical Crosstalk	dB	45	40
Return Loss	dB	40	40
Attenuation Resolution	dB/step	0.1	0.1
Attenuation Accuracy	dB	+/-0.5	+/-0.5
Response Time (0-20 dB attenuation)	ms	10	10
Min Input Optical Power per Channel	dBm	-35	-35
Max Input Optical Power per Channel	dBm	17	17
Min PD Responsivity	mA/W	14	14
Max PD Dark Current	nA	1	1
Power Dissipation	W	2	4
Drive Voltage	V	5	5
Module Dimensions	mm	150x125x14	200x130x15
Storage Temperature Range	°C	-40 ~ +85	-40 ~ +85
Operating Temperature Range	°C	-5 ~ +70	-5 ~ +70

For more information
visit www.enablence.com