



# TKS-POA

## High Power Optical Amplifier with integrated PON Combiner

### Product Description

TKS-POA series is multi-port optical amplifier that provides high optical power at each output and the possibility for combining of the signals from xPON equipment (1310 and 1490nm) and the broadband CATV signal. This amplifier is especially designed for application in GePON and GPON networks.



### Application

- Single-mode fiber 1550 amplification network
- FTTH network
- CATV network

### Performance Characteristics

- Adopts Er-Yb co-doped double-clad fiber technology;
- Output ports: 4-32 optional;
- Optical output power: total output up to 2W;
- Low noise figure: < 5dB when input is 0dBm;
- Perfect network management interface, in line with standard SNMP network management;
- Intelligent temperature control system make the power consumption lower;
- Output power: 0-3dB adjustable.

### Available Options

- 4ports x 19 / 22dBm
- 8 ports x 19 / 22dBm
- 16 ports x 19 / 21 / 22 dBm
- 32 ports x 21 dBm

### Technical Specification

Item	Unit	Technique parameters	Remark
Operating Bandwidth	nm	1545 - 1565	
Optical Input Power Range	dBm	-13	
Maximum Optical Output Power	dBm	34	
Output Power Stability	dBm	±0.5	

Noise Figure		dB	5.0	Optical input power 0dBm, =1550nm
Return Loss	Input	dB	45	
	Output	dB	45	
Optical Connector Type			SC/APC	
C/N		dB	50	Test condition according to GT/T 184-2002.
C/CTB		dB	63	
C/CSO		dB	63	
Power Supply Voltage		V	A: AC160V - 250V (50 Hz)	
Operating Temperature Range		°C	-52	
Maximum Operating Relative Humidity		%	Max 95% No Condensation	
Storage Temperature Range		°C	-100	
Maximum Storage Relative Humidity		%	Max 95% No Condensation	
Dimension		mm	483(L) x 440(W) x 88(H)	

## PON Combiner

Item	Unit	Technique parameters	Remark
Operating Bandwidth	nm	1550 ± 10 1490 ± 20 1310 ± 50	
Optical Attenuation 1550	dB	0.5	Including connectors
Optical Attenuation 1310/1490	dB	0.8	
Input Connector	dBm	SC/APC	
Output Connector	dB	SC/APC	

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