

## ERBIUM DOPED FIBRE AMPLIFIER - EDFA

### APPLICATIONS

- Optical amplification for the wavelength of 1550nm
- Realization of vast HFC- and RFoG-networks
- Decentral signal distribution / amplification in FTTx / xPON-networks
- CATV-overlay in FTTx and xPON-networks



### PRODUCT FEATURES

- High optical output power of +18dBm or +21 dBm at each output port (other optical output levels on request)
- Optical attenuator up to 6 dB in 0.1 steps is integrated
- Optical MEMS switch for redundancy is integrated
- Up to 64 possible optical outputs
- Integrated optical isolation of the downstream wavelength of 1550 nm and all other possible wavelengths in upstream for the realization of standard-RFoG, CWDM-RFoG- or GPON-networks
- Low insertion loss in DS&US and high isolation of DS&US (>50dB)
- Low noise figure
- Parameter-Display: input/output optical power, pump-bias, temperature and voltage
- Supports SNMP monitoring and WebGUI
- Redundant power supply
- 19" rack version, 1 RU for up to 8 outputs and 2 RU for 16, 32 and 64 outputs



Typ	Item No.	Number of outputs	Optical output/ port (dBm)	W=WDM Filter	Connector CATV port	Connector xPON port	Connector COM port	Power supply	Front/back powered
OA 1-21-LA-GF	57004494	1	21				LC/APC		BP
OA 08-21-W-SA-LP-LA-DC	57004419	8	21	W	SC/APC	LC/PC	LC/APC	DC	BP
OA 04-18-LA-DC	57004449	4	18				LC/APC	DC	BP
OA 04-21-W-SA-LP-LA	57004295	4	21	W	SC/APC	LC/PC	LC/APC		BP
OA 08-21-W-SA-LP-LA	57004294	8	21	W	SC/APC	LC/PC	LC/APC		BP
OA 16-21-W-SA-SP-SA	57002009	16	21	W	SC/APC	SC/PC	SC/APC		BP
OA 32-21-W-SA-LP-LA-DC	57004317	32	21	W	SC/APC	LC/PC	LC/APC	DC	BP
OA 32-21-W-SA-LP-LA	57003982	32	21	W	SC/APC	LC/PC	LC/APC		BP
OA 64-21-W-SA-LP-LA	57004170	64	21	W	SC/APC	LC/PC	LC/APC		BP
OA 64-0-W-SA-LP-LA-DC	57004546	64	0	W	SC/APC	LC/PC	LC/APC	DC	BP



Type 19" , 1 or 2 RU  
Up to 64 optical outputs

## TECHNICAL SPECIFICATIONS

Performance		Min.	Typ.	Max.	
Optical features	Optical input wavelength ( $\lambda$ )	nm	1540	1550	1562
	Optical input level	dBm	-5	3	10
	Optical output power (at each output)	dBm		14-21	tunable
	Number of ports		1		64
	Noise ratio	dB			5.5
	Polarization dependent loss	dB		0.1	
	Polarization dependent gain	dB			0.5
	Insertion loss (DS&US)	dB	0.6	0.9	1.6
	(1550nm in DS, CWDM/ 1550 in US)				
	Isolation DS/US	dB		> 50	
Optical Switch (MEMS)	Insertion loss	dB	0.5		
	Switching time	ms	5		
General features	Remote management		Web GUI / SNMP V2 (Ethernet port)		
	Power supply	V AC	170	230	264
		VDC	40	48	57
	Power input	W			50
	Operating temperature	°C	-5		+55
	Storage temperature	°C	-20		85
	Dimensions	mm		240 x 482 x 44/88	
	Weight	kg		8	11

High isolation between DS/US necessary. Example:

Return receiver (Rx) Input power (dBm)	Gain and isolation DS / US		Optical DS performance at the input of the Upstream-Rx	
	21 dB	30 dB		-9 dBm (noise) -29 dBm (noisefree)
	21 dB	50 dB		