

CATV RF SYSTEM

Lightem LA51 series- Booster EDFA for CATV application

Lightem LA51 Booster EDFA is working in single wavelength in CATV system. Features low noise figure, large saturation output power, Lightem LA51 CATV Booster EDFA can be applicable in the group center, substation and trunk circuit.

Lightem LA51 adopts the premium grade pump laser and America OFS erbium-doped optical fiber. The pump laser is well protected with the complete control of APC, ACC and ATC circuitry; together with ventilation and heat control the pump laser is running in a control environment. The RS232 and RJ45 port offer serial communication and SNMP network port. The work status of equipment is shown on the LCD display, with warning signal; Optical loss, laser operating status etc. All the parameters can be set via the LCD display, or can be set with RS232 or SNMP.



FEATURES

- Low noise figure
- High output power
- Power adjustment via the button on front panel (optional)
- RS232 commutation and SNMP network management optional
- Excellent P/P ratio
- Available of 19" rugged housing

APPLICATION

- AM CATV
- Digital CATV System
- DBS and MMDS
- FTTP

SPECIFICATIONS

Optic Features	Min	Typ	Max	Supplement
<i>Operating wavelength range</i>	1540 nm		1563 nm	CATV
<i>Input power</i>	-10 dBm		+7.5 dBm	
<i>Maximum output power</i>	+10 dBm		+26 dBm	Pin=0dBm
<i>Output power adjustable range</i>	-6 dBm		0	LA5100/P
<i>Number of output ports</i>	1		8	SC/APC
	1		6	LC/APC
<i>Difference of each output power</i>	-0.5 dBm		+0.5 dBm	
<i>Noise figure (Pin=0dBm)</i>			6.3 dB	LA5126
<i>Polarization dependence loss</i>			0.3 dB	
<i>Polarization dependence gain</i>			0.4 dB	
<i>Polarization mode dispersion</i>			0.5 ps	
<i>Input/output isolation</i>	30 dB			
<i>Pump power leakage</i>			-30 dBm	
<i>Echo loss</i>	55 dB			APC

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General Features			
<i>SNMP network management interface</i>			RJ45
<i>Communication interface</i>			RS232
<i>Power supply</i>	90 V	265 V	220VAC
	30 V	72 V	-48VDC
	23 V	50 V	+24VDC
<i>Power consume</i>	50 W		
<i>Work temp.</i>	-5 °C	65 °C	
<i>Storage temp.</i>	-40 °C	80 °C	
<i>Operating relative humidity</i>	5	95%	
<i>Size (W)×(D)×(H)</i>	483×368×44 (mm)		1RU (19")
	315×391×133 (mm)		3D (12.4", desk-type)
	399×244×165 (mm)		Outdoor

ORDERING INFORMATION

Model	Output power Max (dBm) Pin=0dBm	Noise figure (dB) Pin=0dBm	Input power range (dBm)			Function
			Min	Typ	Mx	
LA5113/ON	≥13	4.0	-10	0	+10	With SNMP network management, output power is not adjustable
LA5114/ON	≥14	4.1				
LA5115/ON	≥15	4.2				
LA5116/ON	≥16	4.3				
LA5117/ON	≥17	4.5				
LA5118/ON	≥18	4.8				
LA5119/ON	≥19	5.0				
LA5120/ON	≥20	5.3				
LA5121/ON	≥21	5.5				
LA5122/ON	≥22	5.8				
LA5123/ON	≥23	6.0				
LA5124/ON	≥24	6.3				
LA5125/ON	≥25	6.5				
LA5126/ON	≥26	6.8				
LA5120/PN	≥20	5.3	-10	0	+10	With SNMP network management, the output optical power adjustable 0~ -6dB
LA5121/PN	≥21	5.5				
LA5122/PN	≥22	5.8				
LA5123/PN	≥23	6.0				
LA5124/PN	≥24	6.3				
LA5125/PN	≥25	6.5				
LA5126/PN	≥26	6.8				