



HighPower EDFA for FTTH/FTTB

Model no. NTPL-EDCA819P



Application:

- ◆ Analog CATV Transmission
- ◆ FTTH Optical Access
- ◆ Optical Distribution
- ◆ Free Space Optical
- ◆ R&D and Training

Feature

- ◆ High Power: Up to 2W total, 1 Unit for 2000~4000 optical nodes
- ◆ Low Noise Figure: Below 5.5 dB (+5 dBm input)
- ◆ Low CSO: <-70 dBc
- ◆ Controllability and maneuverability: Dual CPU to deal with Control loop and Communication separately
- ◆ High Stability and Reliability: MTTF > 150000 Hours
- ◆ Redundancy Hot Swap power module: 110/220 VAC and 48 VDC can plug Mix
- ◆ Perfect Network Interface: Ethernet, RS-485 and RS-232 port
- ◆ Intelligent Temperature Control System: using a dedicated Temperature control chip which make cooling and power loss reduce 30% than competitors

- ◆ Output Power can be Adjustable by network and manual
- ◆ Integrated 1310nm, 1550nm WDM (Optional)
- ◆ OEM, Module is available

Description:

These products are widely used in CATV transmission system and the high power distributing system FTTH requirement. It can be used for CATV analog/digital signal distribution.

Employ intelligent temperature control system: (1) Adopt special temperature control circuit, heat radiating and power consumption can be reduced 30%, (2) The professional air flow design can also ensure the best temperature stability, at the same time powerful fan will start when the case temperature is over 45°C, meanwhile it will stop as the temperature is under 40°C. The technology makes sure the thermal stability of system and fan's long life.

Optical characteristics

Parameter	Symbol	MIN	TYP	MAX	UNITS
Operating Wavelength	λ_c	1540	1550	1565	nm
Saturated Output Power <i>Note 1</i>	P _o	13	-----	33	dBm
Input Power	P _i	0	-----	+10	dBm
Gain	G	-----	-----	30	dB
Noise Figure <i>Note 2</i>	NF	-----	-----	6	dB
Output Power Stability	ΔP_o	-----	± 0.05	± 0.2	dB
Input Isolator	I _{SOi}	30	-----	-----	dB
Output Isolator	I _{SOo}	30	-----	-----	dB
Input Pump Leakage	P _{Li}	-----	-----	-35	dBm
Output Pump Leakage	P _{Lo}	-----	-----	-45	dBm
Return Loss	R _L	-----	-----	-45	dB
Polarization Dependent Gain	PDG	-----	-----	0.3	dB
Polarization Mode Dispersion	PMD	-----	-----	0.5	ps

Note1: Optional

Note2: Tested at +5 dBm Input

Environmental characteristics

Parameter	Symbol	MIN	TYP	MAX	UNITS
Operating Temperature	Tw	-5	----	60	°C
Storage Temperature	Ts	-40	----	80	°C
Humidity Note	-----	10	-----	90	%

Note: No Condensate

Electrical Characteristics

Parameter	Symbol	MIN	TYP	MAX	UNITS
Power Supply (1)	Vps	170		264	VAC
Power consumption	P	----	----	50	W

(1) :110VAC, 220VAC and -48VDC is optional, and duplicate supply is optional.