

Description:

Optical amplifier with double conversion. Input optical signal is converted to RF, processed accordingly to stabilize the level and then converted back to optical at same or different wavelength by means of FP, DFB or CWDM laser diode.

The difference between output and input optical power determines the amplification coefficient which could vary in accordance to selected option as well as the kind of modulating signal (analog, digital or combination of the two).

Features:

- Gain: 9 ÷ 21dB
- Independent input and output wavelengths
- Automatic Level Control (ALC)
- OMI adjustment
- Universal RF port (Injector or RF Output)
- Compact Hermetic Housing



OPR-12F Technical

DTK

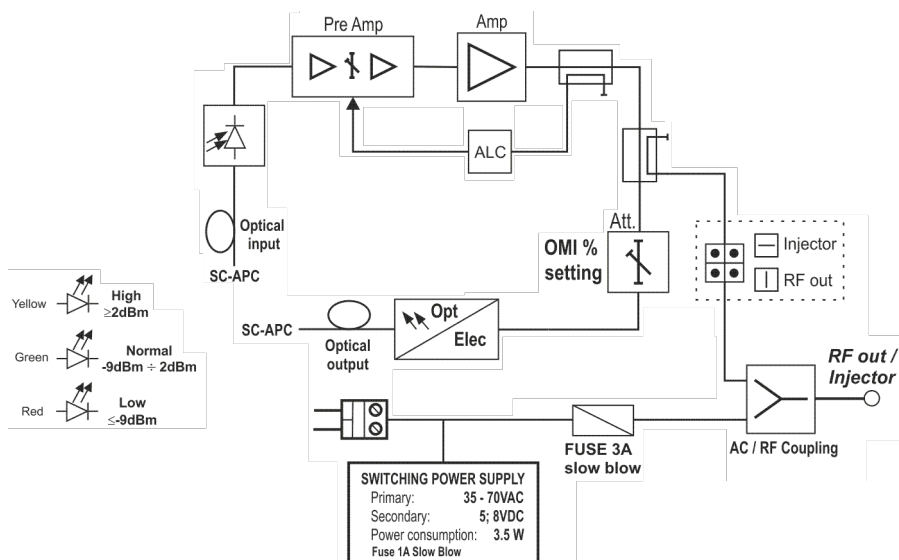
OPR-12F Block Scheme

Optical Section		RF Section		General Specifications	
Input Optical Converter		Frequency Range	47 ÷ 862MHz	Power Supply Mains	175 ÷ 265VAC
Wavelength	1290 ± 1600nm	Flatness	± 0.75dB	Power Supply Coaxial	35 ÷ 75VAC
Fiber	SM 9/125µm	Universal Test/Injector port	-15dB, 5/8 inch	Low voltage lockout	30VAC
Return Loss	> 40dB	Return Loss	18dB @ Z=75Ω	Delay start (manual)	2.5; 3.5; 5; 6s
Connector	SC/APC	Optical Gain		Power Consumption	≤ 3.5W
Minimum Optical Power	-3/-6/-9 or -12dBm	Equivalent Optical Gain:		Operating Temperature	-20 ÷ +50°C
Equivalent noise at input	≤ 8pA / VHz	- min @ optical input power -3dBm	9dB	Protection Level	IP65
Output Optical Converter		- min @ optical input power -12dBm	21dB	Dimensions	165x145x100mm
Output Optical Power	+6dBm ÷ +9dBm	Analog test port	1V/mW	Weight	1.3kg
Wavelength	- DFB 1310 ± 20nm - DFB 1550 ± 20nm - CWDM 1270 ÷ 1610, 20nm step	Output optical power test port	1V/mW		
Connector	SC/APC				

Important Notes:

OPR-12F-C-6-31-N-9 is a optimal solution for Analog Programmes
 OPR-12F-C-12-55-N-6 is a optimal solution for Digital Programmes

CWDM Wavelength according to international standard ITU-T/6.694.2
 Option 9dBm (8mW) relates oly to wavelength 1310nm.



Configuration Table					
Main	Supply Voltage	Min optical power	Wavelength	CWDM ^{see notes}	Output Optical Power
OPR-12F	Coaxial (C): 35 ÷ 70VAC	3: -3dBm	31: 1310	N: No CWDM	6: 6dBm (4mW)
		6: -6dBm	49: 1490		
	Mains (M): 175 ÷ 265VAC	9: -9dBm	51: 1510	Y: CWDM	9: 9dBm (8mW) ^{see notes}
		12: -12dBm	55: 1550		