

Product Description:

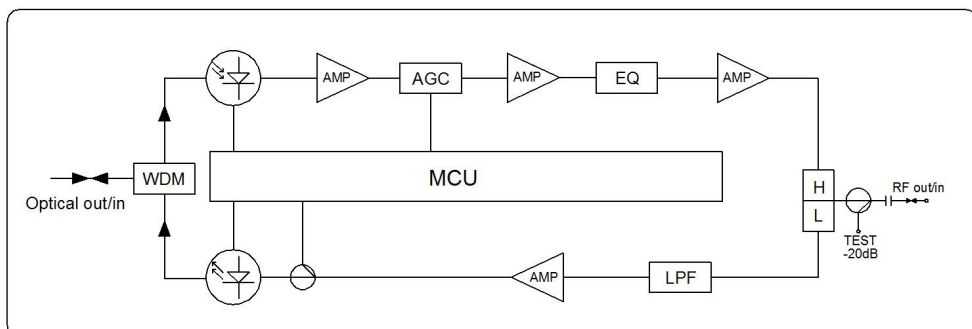
The SDU RFoG F series is mainly used for RFoG network. "OBI-Free" R-ONU eliminate the Optical Beat Interferences(OBI) that has been an issue in the traditional RFoG deployments. Its return path laser can work in burst mode. The upstream output optical wavelength can be set as CWDM standard wavelength to shield the OBI effectively.



Features:

- 1) Support downstream optical AGC, The control range is -6~+2dBm;
- 2) Burst mode is supported;
- 3) OBI-Free technology on this model supports up to 16 R-ONUs transmitting into a single optical input;
- 4) 0.2nm as one step, and the automatic control of transmitting wavelength can be reached by the temperature change randomly

Block Diagram:



Characteristics:

(1) Downstream

No.	Item	Unit	Specification
Optical Specification			
1	Receiving Optical Power	dBm	-8~+2
2	Optical AGC Control Range	dBm	(default as-6~ +2)
3	Optical Return Loss	dB	>45
4	Optical Receiving Wavelength	nm	1550 or optional
5	Optical Connector	-	SC/APC
6	Optical Fiber Type	-	Single mode
Link Performance			
1	RF Output level	dBuV	80
2	CTB	dBc	≥60
3	CSO	dBc	≥60
4	C/N	dBc	≥52
0dBm optical power input CENELEC 42 channels, EQ=3dB, Frequency=1000MHz			
RF Specification			
1	Frequency Range	MHz	54/87/258-1000
2	RF Output Return Loss	dB	-16
3	Flatness in Band	dB	+0.75@Pin=-3dBm
4	Fixed Equalizer	dB	2-4
5	Equivalent Noise Current	-	<5, 5pA/rt(Hz)
6	Output Impedance	Ω	75

(2) Upstream(DFB laser type)

No.	Item	Unit	Specification
1	Optical Transmitting Wavelength	nm	1610nm, 0.2nm as one step, and the automatic control of transmitting wavelength can be reached by the temperature change randomly
2	Output Optical Power	mW	2
3	Optical Connector	-	SC/APC
4	Maximum Delay from Monitoring RF Power onto Laser Optical Power on	uS	1.3
5	Maximum Time for Laser Output Optical Power from 10%to 90%	uS	1.0
6	Minimum Rise Time for Laser Output Optical Power from 10% to 90%	nS	100
7	Maximum Delay from Monitoring RF Power off to Laser Optical Power off	uS	1.6
8	Maximum Time for Laser Output Optical Power from 90% to 10%	uS	1.0
9	Minimum Fall Time for Laser Output Optical Power from 90% to 10%	nS	100
RF Specification			
1	Frequency Range	MHz	5-42/65/204
2	Flatness in Band	dB	±0.75
3	Output Impedance	Ω	75
4	RF input Return Loss	dB	>16
5	NPR Dynamic Range	dB	>15@NPR>30
6	Laser on Level	dBuV	80±1
7	Laser off Level	dBuV	65±1

(3) General Specification

No.	Item	Unit	Specification
1	Power Voltage	V	AC(90-265)V
2	Protection Class	-	IP41
3	Operating Temperature	°C	-40-60
4	Storage Temperature	°C	-40-65
5	Relative Humidity	%	Maximum 95%(no-condensing)
6	Power Consumption	W	<8
7	Dimension	mm	180(L)*85(W)*40(H)

Order Matrix:

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Type	RFoG	OBI	Fiber Port	Band Split	Bandwidth	Power Option
SDU=Single-Dwelling Unit		D=W/N OBI-FREE	01=single fiber port	4=42/54MHz	10=1002MHz	0=None
MDU=Multi-Dwelling Unit		F=With OBI-FREE	02=dual fiber port	6=65/87MHz	12=1218MHz	1=America
				8=85/105MHz		2=Europe
				2=204/258MHz		3=Japan

- ◇ SDU RFoG F is the family name of series, which still can have the related products according to the Order Matrix
- ◇ The AGC Range & Output level also can be customized according to customers' exact request

Mechanical

