

Amplifier

DMAExxxxxxxxxxx



DESCRIPTION

An apparatus with 318x 430x43(HxWxD) physical dimensions in mm scale which are used for amplifying the signals transmitted to long distance in DWDM optical networks. Amplifiers are produced in different Inlines, Booster and PReAm models. Booster is used for amplifying the signal power in the source station, Inline in the mid-route and PreAm is used in the Destination. This system functions in AGC and APC modes.

Specifications of the apparatus (front view) includes:

An In/Out adaptor

Alarm LED (consisting of Pump, out, PWR, Ptem, ma, In, Run and Tem)

The REST switch equivalent to Reset

The Eth and Console ports

The PS-B, FAN, RS-A and ERR lights

In the rear view: There are two Power switches, two Connectors and two Fuses.

Type and gain of amplifier	Part number
Preamp, gain:20	DMAEDFPA016020
Preamp, gain:25	DMAEDFPA016025
Preamp, gain:30	DMAEDFPA016030
Preamp double, gain:28	DMAED2PA020028
Booster, gain:12	DMAEDFBA016012
Booster double, gain:14	DMAED2BA022014
Inline, gain:12	DMAEDFLA016012
Inline double, gain:12	DMAED2LA022024
Doble Preamp and Booster	DMAEBP22201428
Preamp and Inline	DMAEPL20222824
Booster and Inline	DMAEBL22221424

Product specification

parameter	Min	Typ	Max	Units
Operating wavelength	1528		1561	nm
Input optical power range	-15		4	dBm
Input optical power threshold	-20	-	-	dBm
output power	-3		16	dBm
On/off gain		12		dB
Gain flatness		1.5	-	dB
Noise factor	-	5.5	0.3	dB
Operating voltage	AC220V & DC-48V			
interface	LC-UPC			
Working temaratene	-5	-	+60	centigrade
Storage temperature	-40	-	+80	centigrade
Humidity	5	-	85	%
Power supply	85/170	110/220	132/264	VAC
Size(H*D*W)	430x320x43.6			mm

Panel LED Indicators illustration

Item	Description
PS_A	Power Supply A normal, green is on.
PS_B	Power Supply B normal, green is on
FAN	Fan LED, ON is normal
ERR	While error, red is on
RUN	System operating normally, green is on
IN	When the input optical power is below the set threshold input power, red is on.
OUT	When the output optical power output power lower than the set threshold, red is on
PUMP	Pump laser is abnormal, red is on
mA	Pump current warning LED Indicators, when pump current is abnormal, red is on.
Ptem	Pump temperature warning LED Indicators, when the pump temperature is too high, red is on
Tem	Equipment temperature warning LED Indicators, when the device temperature is too high, red is on

Device interface definition

Interface Printing	Name	Function
RJ45	Ethernet Port	Remote Management Interface
Consul	Serial port	Serial Management Interface
In	Input	EDFA Input Interface
Out	Output	EDFA Output Interface
P_In	PA Input Interface	
P_Out	PA Input Interface	
MON	Monitoring Port	

Raman amplifier

DMARAMAN014015

DESCRIPTION

This product is a high-power Raman Amplifier module which is used in low noise, long span or high-speed optical transmission system. Applying transmission fiber as the gain medium to form distributed amplification which can reduce system noise and get best gain and noise index.



Features

- Distributed low-noise amplification
- control and operate: Dual CPU process control Loops
- Interface respectively
- High stability and reliability
- Intelligent temperature control system: power consumption and hot
- Radiation reduces 30% than common products
- Pump polarization-Independent design

specification

parameter	symbol	Min	Typ	Max	Units
Operating wavelength	λ_c	1525	1550	1565	nm
Pump wavelength	λ_p	1425	–	1505	nm
Pump output power	Po		500	1000	mw
On/off gain	G	6	–	15	dB
Gain flatness	FL		1	2	dB
Polarization dependent gain	PDG	–	–	0.3	dB
PMD	PMD	–	–	0.3	ps
Relative noise figure	NF	–	–	0	dB
Working temaratene	c	–5	–	+60	centigrade
Storage temperature	c	–40	–	+80	centigrade
Humidity		5	–	85	%
Power supply		85/170	110/220	132/264	VAC
size	H*D*W	44*236*483			mm
Weight		7			kg
Power consumption		18			w
cooling		Air cool fan			
Interface		RS-232 Ethernet			

Mechanical Dimension

