



37dBm Multiport High Power Fiber Amplifier Module

►► Description

YEDFA-MP series of high power fiber amplifiers are especially designed for FTTx, CATV, FDC and HFC analog amplification applications those require high reliability. Compared to conventional amplifiers, these modules are more compact, powerful, stable and reliable.

This line of high power fiber amplifier features a dual stage amplification configuration, pre-amplifier and power amplifier and the use of selected multi-channel splitters with extremely low IL and high reliability.

Both input and output signals are sampled and monitored with a feedback circuit. ACC (automatic current control) and APC (automatic power control) circuits are designed into the amplifier to ensure high stability and reliability of output power. Standard user-friendly RS-232 interface enables reliable connectivity with customer's control system.

►► Features

- Low noise figure
- Optional output configurations: 19dBm * 32 ports, 20dBm * 24 ports, 22dBm * 16 ports, 26dBm * 8 ports, 29dBm * 4 ports, 33dBm * 2 ports or 37dBm * 1 port, etc.
- Highly reliable laser diode pumps
- High stability and reliability based on multi-mode pumping and fiber combiner technology
- Wide operating temperature range

►► Applications

- Test and Measurement
- Analog CATV transmission systems
- Data & Voice optical transmission systems
- Optical distribution systems
- FTTx
- Free space communication

►► Typical Mechanical Structure

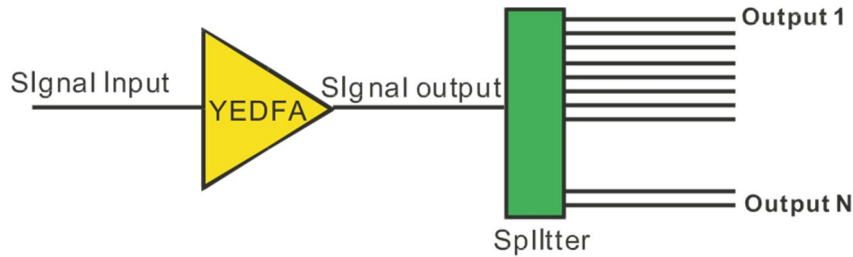


Mechanical Outline: 170x150x55mm Module



►► Specifications

Typical Function Structure



The YEDFA-MP Module Optical Characteristics

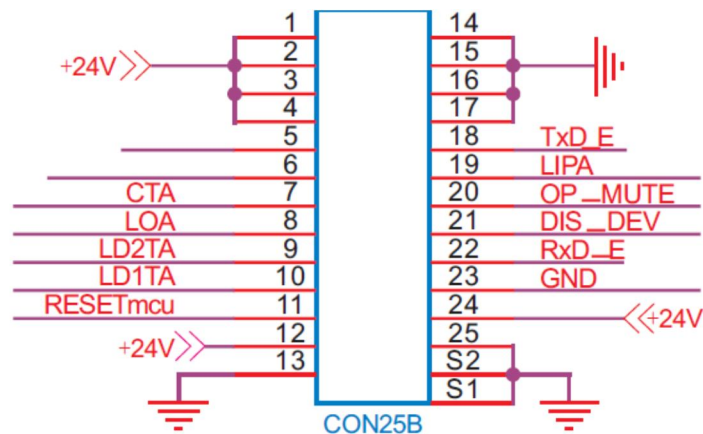
Parameter	Unit	Specifications			Notes
		Min.	Typ.	Max.	
Signal Wavelength Range	nm	1543		1565	
Input Port Power	dBm	-5		10	
Output Port Power	dBm	19		37	One port output power. Other output power upon request
Output Ports		1		32	Other ports upon request
Signal Noise Figure	dB		5.0	7.0	Pin=3dBm@1550nm
Signal Output Power Difference	dB			1.2	
Signal Output Power Stability	dB			0.4	
Return Loss	dB	40			
Polarization Dependent Gain	dB			0.5	
PMD	ps			1	
Connectors			SC/APC		Input & All Output Ports (other connector upon request)

Environmental & Mechanical Characteristics

Parameter	Unit	Typ.	Notes
Operating Temperature Range	℃	-5 to 55	
Storage Temperature Range	℃	-20 to 70	
Humidity	%	5 to 95	
Dimensions (W*D*H)	mm	170×150×55	
Cooling			Conductive via surface & Fans

►► Pin Out

Electrical PIN Assignment



**Pin Definitions**

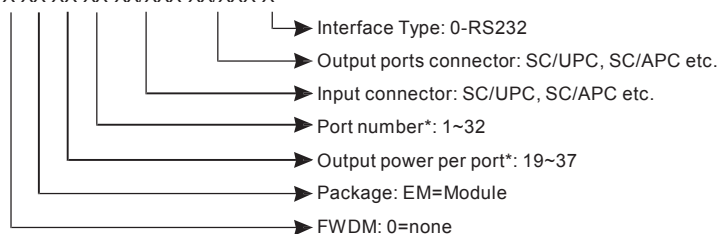
NAME	PIN NO.	DESCRIPTION
Anode	1,2,3,4,12,24	Positive Supply Voltage. Input pin. DC 24V.
NC	5,6	No connect.
CTA	7	Case Temperature Alarm. Output pin. TTL 5V = alarm.
LOA	8	Loss of Output Alarm. Output pin. TTL 5V = alarm.
LD2_TA	9	LD2 Temperature Alarm. Output pin. TTL 5V = alarm.
LD1_TA	10	LD1 Temperature Alarm. Output pin. TTL 5V = alarm.
RESETmcpu	11	Reset MCU of the module. Input pin. TTL 5V = reset.
Cathode	13,14,15,16,17,25	Ground reference point for 24V DC source.
TxD_E	18	Transmitter Data Output of the Serial (UART) Port.
LIPA	19	Low Input Power Alarm. Output pin. TTL 5V = alarm.
OP_MUTE	20	Output Power Mute. Input pin. TTL 5V = mute.
DIS_DEV	21	Disable Device. Input pin. TTL 5V = disable.
RxD_E	22	Receiver Data Input of the Serial (UART) Port.
GND	23	Ground reference point for the Serial (UART) Port.
S1,S2		The connector mounting PIN, connected to the Ground reference point for 24V DC source.

Electrical Characteristics (Module)

Parameters	Symbol	Min.	Typ.	Max.	Unit
Power supply	V	18	24	36	V
Power consumption	P	-	55	75	W
TTL input voltage	H	2.4	-	-	V
	L	-	-	0.8	V
TTL output voltage	H	2.4	-	-	V
	L	-	-	0.4	V

►► Order Information

YEDFA-MP-X-XX-XX-XX-XX/XXX-XX/XXX-X



*Options are 19dBm * 32 ports, 20dBm * 24 ports, 22dBm * 16 ports, 26dBm * 8 ports, 29dBm * 4, 33dBm * 2 ports or 37dBm * 1 port. Other options are available upon request