

## SINGLE CHANNEL AMPLIFIER

PART NUMBER : LXM-S-21



### APPLICATIONS

- ✓ C band
- ✓ Single Channel (SONET/SDH : STM-16/OC-48)
- ✓ Analog (CATV/PON)
- ✓ Inline, Pre-Amplifier or Booster Amplification

### FEATURES

- ✓ C band
- ✓ High Saturation Output Power up to 21dBm
- ✓ Single +5V Operation
- ✓ Economical, Compact Package  
: 150 x 120 x 24mm (with heat sink)

Available for the C band with up to 21dBm of output power, low ripple and noise figure, the single channel EDFA is the perfect solution for metro regional, long-haul and ultra long-haul networks. Single channel EDFA has very high reliability and can be used to various optic applications. It also provides various output power, low noise figure and wide operating range. It is a platform of next-generation fixed or variable gain amplifiers that combines state-of-art electronics and superior optical performance. Fully qualified optical components selected by Luxpert's staff make it possible to provide the stability of operation and reliability that is essential to today's high value added access network systems. This standard and high performing single channel EDFA project has been designed from Luxpert's extensive experience and it should meet your technical needs, time-to-market requirement, and most importantly the target cost objective.

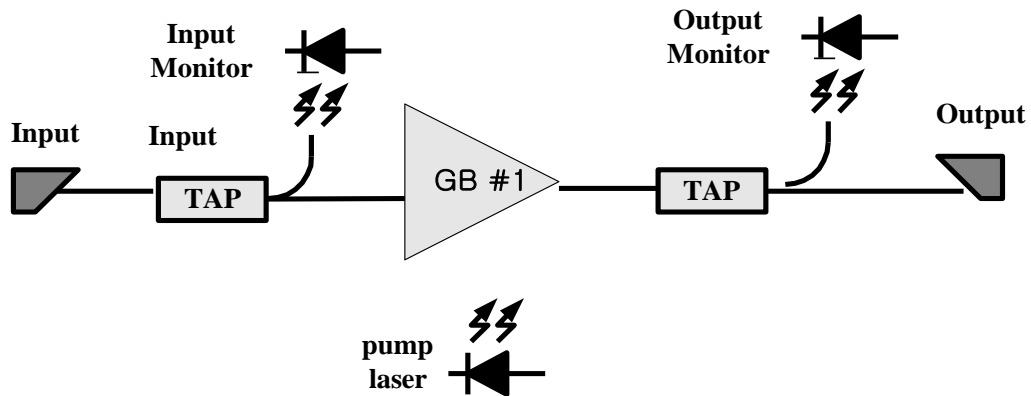
**OCTICAL CHARACTERISTIC**

Parameters	Min	Typ	Max	Units
Wavelength Range	1530		1560	nm
Optical Output Power			21	dBm
Amp Input Power Level	-10	0	3	dBm
Noise Figure		5.5	< 6.0	dB
Polarization Sensitivity of Gain			0.5	dB
Input/ Output Isolation		> 50		dB
Operating Temperature Range	0	25	60	°C

**ABSOLUTE MAXIMUM RATING**

Parameters	Min	Typ	Max	Units
Storage Temperature	-40	20	70	°C
Operating Temperature	0	25	60	°C
Storage Humidity	0		90	%
Humidity	20		80	%
DC Power Supply Voltage	4.8	5.0	5.2	V
Power Supply Current			3.0	A
Electrical Power Consumption			15	W
Input Voltage - High	2.0			V
Low			0.8	V
Output Voltage - High	2.4			V
Low			0.4	V

## BLOCK DIAGRAM



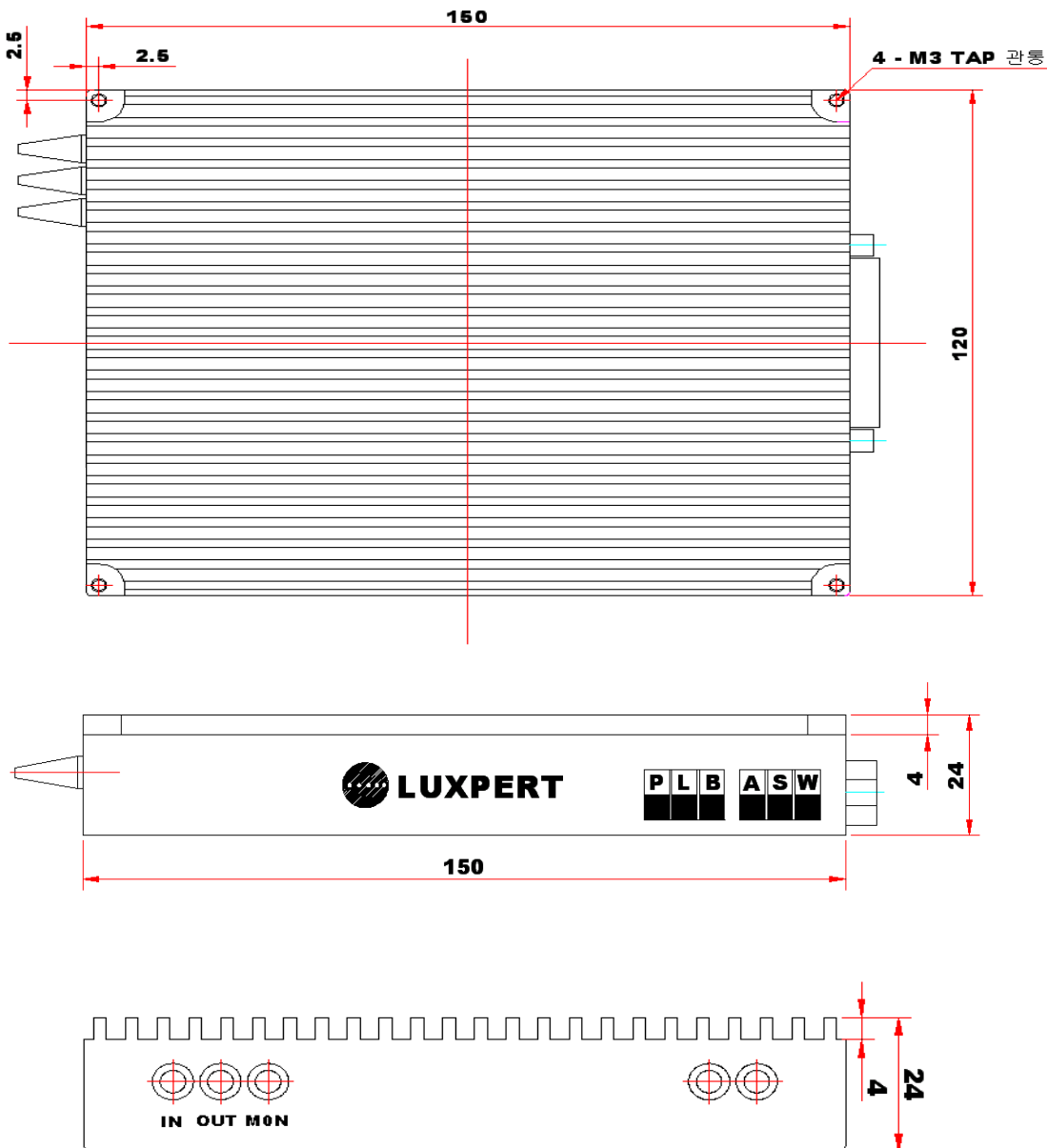
## ELECTRICAL PIN ASSIGNMENT

√ D-SUB 25 MALE CONNECTOR

Pin	Description	Pin	Description
1	+5VDC Power	14	GND
2	+5VDC Power	15	GND
3	+5VDC Power	16	GND
4	+5VDC Power	17	GND
5	Reserved	18	RS-232 OUT
6	Reserved	19	Loss of input power alarm
7	EDFA temperature alarm	20	Reserved
8	Loss of output alarm	21	Shutdown
9	Pumps bias alarm	22	RS-232 IN
10	Pumps temperature alarm	23	NC
11	NC	24	+5VDC power
12	+5VDC power	25	GND
13	GND		

**OUTLINE DRAWING**

- ∨ Mounting Screws : 4 x M3 Machine Screw
- ∨ Drawing



## LASER SAFETY INFORMATION

LuXpert Technologies lightwave digital transmission systems and associated optical test sets use semiconductor laser transmitters. The lasers emit lightwaves, at or near infrared wavelengths, into lightguide cables. This light is at the red end of the visible spectrum. Direct exposure at close distances should be avoided. Proper laser safety eyewear must be worn during operation.



*WARNING*

Never view any optical connector with optical instruments other than indirect image converting devices such as the FIND-R-SCOPE1. Viewing optics tends to focus the energy from an optical connector increasing the potential risk for injury.

## CONTACT INFORMATION

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