

### Features

- \* Flattened Raman gain performance
- \* High Raman pump power
- \* Low effective noise figure
- \* Front panel LCD display and status LED indicators for quick access of unit's status
- \* RS-232 and Ethernet interface for local and remote supervision
- \* Redundant dual power supply

### Applications

- \* 10Gb/s and 40Gb/s transmission system
- \* Long-haul DWDM telecommunication system
- \* High channel count system
- \* Increase regenerator spacing

### Description

**GIP Technology** L-band Raman pump unit for Telecom Application (TLM-LRPU-00-00-U) is specifically designed for distributed Raman application, using the entire transmission fiber as a gain medium, can achieve to improve the OSNR and other system performance greatly.

These series incorporate excellent pump power combiner and pump/signal multiplexer to produce highest Raman gain in the most



conversion efficiency. These series are suitable used in ultra-long haul and wide bandwidth DWDM systems of core network and Metropolitan network.

The TLM-LRPU-00-00-U is offered as L-band version in the counter-propagating configuration.

The compact stand-alone type, it not only can be embedded in the EIA 19 and 23-inch rack-mounted chassis, but also can be placed on the desk.

In addition, these units also provide a user-friendly status monitoring via an LCD display, LED indicators, and various communication interfaces (RS232 and SNMP).



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### Specifications

Optical Information		Unit	Description
Operating wavelength		nm	1570 ~ 1604
Pumping configuration*1			Backward
On-off gain*2,*3	Typ.	dB	15
Total output power	Min.	mW	700
Gain flatness	Max.	dB	± 1.5
Effective noise figure*2	Max.	dB	0
Polarization mode dispersion	Max.	ps	0.2
Insertion loss over C band	Max.	dB	0.6
Return loss	Min.	dB	45
Connector			SC or FC
Electrical Information			
Operating voltage		Volt	-48VDC or 100~240 VAC
Pump LD ON/OFF switch			Key type
Control interface			RS232 & SNMP
Power consumption	Typ.	W	60
Environmental Information			
Ambient temperature		°C	0 ~ 40
Storage temperature		°C	-20 ~ 80
Relative humidity (non-condense)		%	5 ~ 85
Outline Information			
Dimension		mm	19" and 23" 1-RU rack, or Bench-Top

\*1. Forward pumping on request

\*2. Measured at 1550nm, Pin= -20dBm

\*3. With 80km G.652 SMF