

# 1.5 $\mu$ m Single-Frequency Light Source Unit

## LIS-ELS-SF-LP-U

### Features

- \* Narrow-linewidth (<2kHz)
- \* Single longitudinal mode
- \* High reliable and stable
- \* Build-in isolator
- \* Maintenance free
- \* Random or linear polarization
- \* RS-232 interface for local supervision.

### Applications

- \* Laser seeding
- \* LIDAR
- \* 1D/3D sensing testing
- \* Fiber laser

### Description

GIP Technology 1.5 $\mu$ m Single-Frequency Light Source Unit (LIS-ELS-SF-LP-U) is a 1.5 $\mu$ m narrow-linewidth light source, which provides the spectral linewidth down to < 2kHz for long coherence length. It can be used in the LIDAR, remote sensing, Interferometric fiber optic sensing, coherent communication as well as research and development (R&D) environments.



The light source does not need water cooling or replacement parts, only 110/220V AC power supply or +12/+24 DC power supply is needed to obtain the single frequency laser.

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



### GIP Technology Corporation

6F., No. 112, Xinmin St., Zhonghe Dist.,  
New Taipei City 235, Taiwan (R.O.C.)  
T:+886-2-8226-7855 [www.giptek.com](http://www.giptek.com)  
F:+886-2-8226-7955 [sales@giptek.com](mailto:sales@giptek.com)

# 1.5 $\mu$ m Single-Frequency Light Source Unit

## LIS-ELS-SF-LP-U

### Specifications

Optical Information		Unit	Description		
Spectral linewidth	Max.	kHz	2	5	15
Mode of operation			CW		
Center wavelength <sup>*1</sup>		nm	1543, 1545 or 1550		
Saturated output power	Min.	mW	6		
Output power stability <sup>*2</sup>	Max.	dB	$\pm 0.05$		
Polarization			Random or Linear		
Polarization extinction ratio <sup>*3</sup>	Min.	dB	20		
Output fiber length	Min.	M	0.5		
Connector			FC/APC		
Electrical Information					
Operating voltage		Volt	100 ~ 240VAC, 50/60Hz		
Control mode			APC		
Control interface			RS-232		
Environmental Information					
Operating ambient temperature		°C	0 ~ 45		
Storage temperature		°C	0 ~ 60		
Relative humidity (non-condense)		%	5 ~ 85 (operating)		
Cooling			Air cooling		
Mechanical Information					
Dimension (W x L x H) <sup>*4</sup>		mm	Benchtop		

\*1. Other wavelength on request.

\*2. Measured at 25°C, maximum output power, 1 hour after 30 minutes warm up

\*3. For PM version only

\*4. OEM module versions available.