

### Features

- \* Repetition rate up to 2MHz
- \* Pulse duration down to 1ns
- \* Integrated TEC controller
- \* 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** Nanosecond Pulsed Light Source Unit (LIS-ELS-NS-LP-U) is a eye-safe nanosecond pulsed light source, which directly modulates a cooled or uncooled laser diode to provide high peak power laser with pulse width as low as 1ns and pulse repetition frequency as high as 2MHz.

This LIS-ELS-NS-LP-U delivers precision pulses which generated internally by an on-board pulse generator, or on-



demand from an external TTL signal. It is compatible with most of the available laser diode form factors.

The pulsed 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 high energy and high peak power pulsed 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

66F., 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)

### Specifications

Optical Information		Unit	Description			
Center wavelength	Typ.	nm	1550±5	1610	1625	1650
Mode of operation			Pulsed			
Peak power* <sup>1,2</sup>	Max.	mW	70	300	50	20
Pulse repetition rate		MHz	Single-shot ~ 2			
Pulse duration* <sup>3</sup>		ns	1 ~ 500			
Spectral linewidth	Max.	nm	0.3	8* <sup>4</sup>	0.5	
Polarization			Random			
Peak power tunability		%	10 ~ 100			
Output fiber length	Min.	M	1			
Connector			FC/APC			
Electrical Information						
Operating voltage		Volt	100 ~ 240VAC, 50/60Hz			
Control mode			ACC			
Control interface			RS-232			
External trigger signal			TTL 3.3V			
Environmental Information						
Operating ambient temperature		°C	0 ~ 50			
Storage temperature		°C	0 ~ 60			
Relative humidity (non-condense)		%	5 ~ 85 (operating)			
Cooling			Air cooling			
Mechanical Information						
Dimension (W x L x H)* <sup>5</sup>		mm	Benchtop			

\*1. Depends on pulse width and pulse repetition rate.

\*2. Higher peak power on request.

\*3. Calculated by full width at half maximum (FWHM).

\*4. Narrow spectral linewidth on request.

\*5. OEM module versions available.