

# PLS-100 Polarized Light Source



## **Product Overview**

The PLS-100 is a light source with well defined polarization. It features stable high output power while maintaining a high polarization extinction ratio (PER) of 45 dB (typ.). Combining PLS-100 and PEM-340 (Polarization Extinction Ratio Meter) provides an optimized system for PER measurement of polarization maintaining (PM) fiber optic devices in both R&D and production environments.

#### **Features**

- Polarization extinction ratio up to 45 dB (typ.)
- High output power and power stability
- Wavelength range 1310 ± 20 nm or 1550 ± 20 nm



### **Applications**

- Alignment of polarization axis for optical devices
- Connectorized PMF patch cord evaluation





## **Adjustable Polarization Axis**

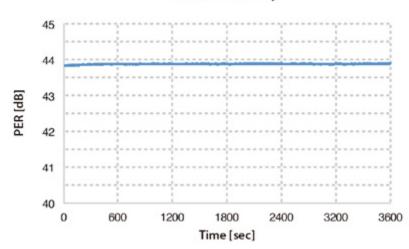
Output polarization adjustable between 0 and 180°



## **High Polarization Extinction Ratio**

PER up to 45 dB



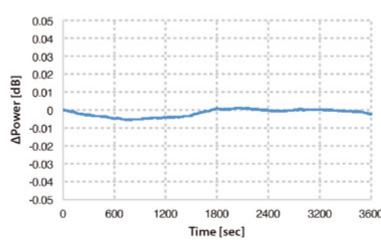




# **High Power Stability**

Output power > 0 dBm and Stability of < 0.1dB over 1 hour

## Power Stability



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105

## **PLS** Optical / Electrical Specifications

Parameter		Unit	Performance
Wavelength and Optical Power Characteristics			
Wavelength Range		nm	1310 ± 20 or 1550 ± 20
Polarization Extinction Ratio (PER)		dB	40 (45 (typ.))
PER Stability @ 1 hour 1		dB	± 0.5 (± 0.1 (typ.))
Output Power		dBm	0 (+3 (typ.))
Power Stability @ 1 hour 1		dB	< ± 0.1 (± 0.05 (typ.))
Power Variation by Changing Angle		dB	± 0.2
Linewidth (FWHM) <sup>2</sup>		nm	> 20
Interface			
Optical Connector		-	FC or SC
Connector Polish		-	SPC
Polarized Axis Adjustment	Fine Adjustment	deg	2
	Coarse Adjustment	deg	180
Environmental Conditions and others			
Operating Temperature		°C	15 to 35
Dimensions (W) x (D) x (H) 3		mm	210 x 350 x 135
Weight		kg	3.5
Supply Voltage		V	AC 100 - 240 $\pm$ 10 %
Frequency		Hz	50 / 60

#### Notes:

## **Laser Safety Information**



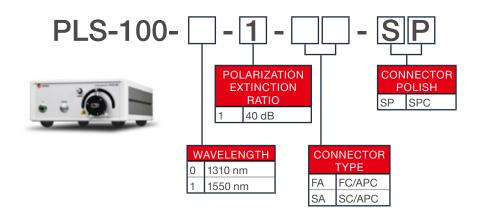
This product is classified class 1M laser product according to IEC 60825-1 (2014).

This product complies with FDA performance standards for laser products except for deviations pursuant to Laser Notice No. 56 dated May 8, 2019.



# Ordering Scheme & Instructions

1. Configure PLS Polarized Light Source







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107

All measurements are taken after 60 min warm up and at stable room temperature.

<sup>&</sup>lt;sup>1</sup> For period of 1 hour, within ± 0.5 °C.

<sup>&</sup>lt;sup>2</sup> Measured at Full Width Half Maximum.

<sup>&</sup>lt;sup>3</sup> Except for the protruding portion.