n L I G H T Pearl™ P10 Series



The Pearl™ P10 series is configured for Display and Entertainment Markets, and optimized to meet the demanding requirements of consistent unit-to-unit performance with ease of integration. The red wavelength spectrum can be tailored to reduce speckle.

nLIGHT's proprietary single-emitter integration technology enables industry-leading efficiency and reliability, thus minimizing system footprint and maximizing reliability.

The Pearl™ uses a revolutionary fiber technology, PowerCore™, which eliminates mode sensitivity to fiber motion and optimizes consistency of performance.

Features

- Patented nXLT™ diode protection for extended life
- Low-current, fault-tolerant architecture
- Industry-leading wall-plug efficiency
- Field-replaceable, PowerCore™ mode-stable fiber
- Plug and play compatibility with nLIGHT's DL system
- Electrically isolated housing

Applications

- Cinema Projection
- Large-Format Projection
- Home Theater Projection
- Laser TV
- Discothèque Light Shows
- **Outdoor Light Shows**

Proven Performance

Typical Device Performance

Package		P10			
Optical					
Wavelength	nm	639			
Wavelength tolerance	nm		± 4		
CW output power	W	2	3	4	
Fiber core diameter	μm		400 or 600		
Beam divergence	NA ¹		0.17		
Fiber length (standard)	m	2.0			
Electrical					
Power conversion efficiency (typical)	%	18			
Operating current (typical)	А	1.1			
Operating voltage (typical)	V	8.3	16.6	20.8	
Mechanical					
Storage temperature range ²	°C	-40 to +80			
Mass	gr	220			
Thermal					
Operating temperature ²	°C	+15 to +25			

Accessories

Line Generator Optic Modules

Collimator and Spot Generator Optic Modules

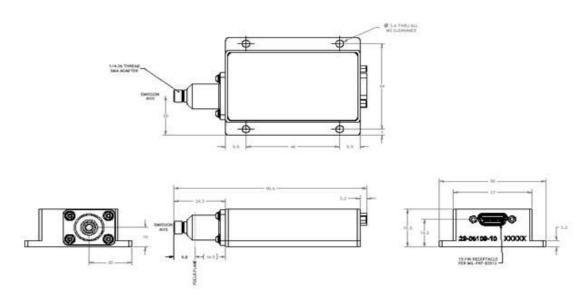
Monitor Photo Diode

PPS™ OEM Diode Controller

Turn-Key System

 $^{^{1}}$ Numerical aperture (NA) is the sine of the half-angle encircling 90% of the optical energy from the fiber. 2 A non-condensing environment is required for storage and operation.

Package Dimensions



CFR Regulation

These components do not comply with the federal regulation (Title 21 CFR, Chapter 1, Subchapter J) as administered by the Center for Device and radiological Health. Purchaser acknowledges that their products must comply with these regulations before they can be sold to an end-use.

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Notice

nLIGHT continually improves its products to provide our customers with outstanding quality and reliability. nLIGHT may make changes to specifications and product descriptions at any time, without notice. In addition, nLIGHT offers a limited warranty to ensure customer satisfaction. For complete details, please contact your nLIGHT sales representative.