

## UHP-F-LED

### Ultra High Power light guide coupled LED light source

Ver. 10

#### Introduction

Prizmatix UHP-F-LED series of Ultra High Power LED (up to 70Watt) light guide coupled light sources was designed especially for microscopy and OEM illumination applications in life science instrumentation, machine vision, confocal microscopy and many others. The UHP-F-LED housing is self-contained light source including all necessary driver electronics and thermal management, no special controller box is required to operate the module if used at maximum power.



#### Key Features

- Single chip Ultra High Brightness LED
- Simple integration for OEM
- Isolated TTL and Analog Input
- Fast TTL switching
- Low optical noise
- Remote control by I<sup>2</sup>C protocol
- Optional Remote Controller for Power and ON/OFF control
- Long life (no lamp or laser tube replacement required)



Optional RemCTRL

#### Applications

- Routine microscopy and cell culture microscopy
- Bio-instrumentation
- Curing of UV adhesives
- Machine vision

#### Optical Specifications

|                                   |   |                                                                            |
|-----------------------------------|---|----------------------------------------------------------------------------|
| Wavelengths                       |   | 365nm, 460nm, 520nm, 625nm<br>and White 4500K, 5700K, 6500K and High CRI * |
| Optical power output from LLG-3** | W | 1.0                                                                        |
| Optical power output from LLG-5** | W | 2.0                                                                        |

\* Other wavelengths are available upon request

\*\* Data is for White-High-CRI LED. LLG-3 and LLG-5 are Liquid Light Guide core diameter 3mm and 5mm respectively.

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# Prizmatix

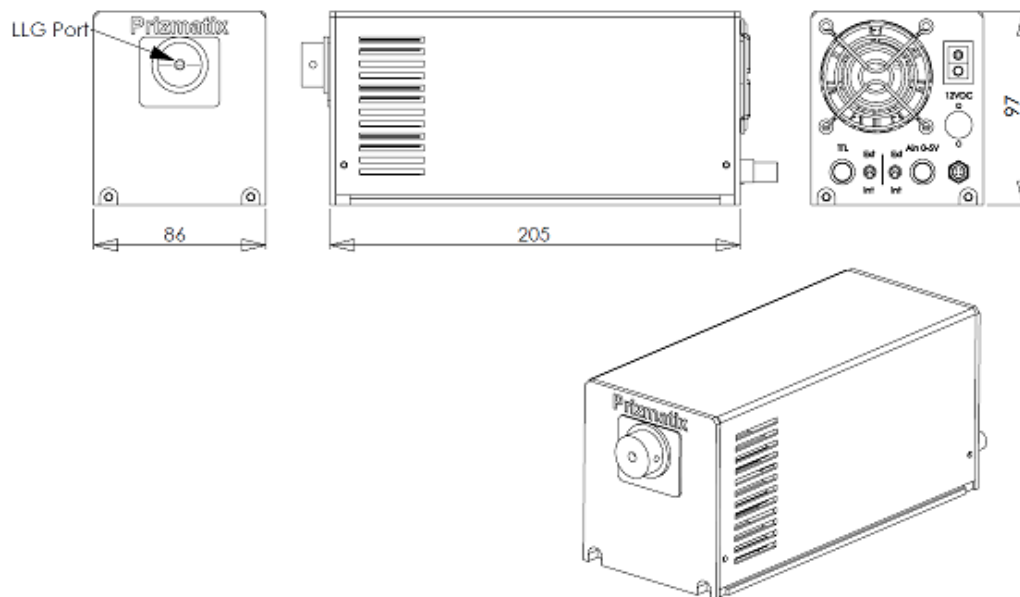
## Electrical Specifications

|                                  |    |                               |
|----------------------------------|----|-------------------------------|
| Digital modulation (TTL Input)   | Hz | DC-30000                      |
| Analog modulation (Analog Input) | Hz | DC-100                        |
| Analog power control             | %  | 0-100                         |
| ON/OFF                           |    | Power switch or by TTL signal |
| Input Voltage (Float)            | V  | 12                            |

## General Specifications

|                                              |    |                   |
|----------------------------------------------|----|-------------------|
| Operation temperature range                  | °C | 10 - 35           |
| Storage temperature range                    | °C | -10 - 55          |
| Operating relative humidity (Non-condensing) | %  | <90               |
| Dimensions                                   |    | See drawing below |
| Head weight                                  | g  | 750               |

## Mechanical Drawings



LLG Port is designed for Prizmatix standard light-guides. For more information see Ordering Information below and: [http://www.prizmatix.com/pdf/mic/Prizmatix\\_Liquid\\_Light\\_guides.pdf](http://www.prizmatix.com/pdf/mic/Prizmatix_Liquid_Light_guides.pdf)

LLG Port and mounting options may vary according to customer's specifications.  
Specifications subject to changes without notice.

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## Ordering Information

| Item Description                                                                                                                                                                                                                                                                                                                                                                                   | P/N                                                                            |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------|
| <p>Liquid Light Guide (LLG-3) Coupled Ultra-High Power LED for microscopy and various illumination applications.<br/>Please specify wavelength or<br/>HCRI – for White HCRI 5700K,<br/>W57 – for White 5700K,<br/>W65 – for White 6500K)<br/>Power adaptor is included.<br/><b>Compatible only with Prizmatix LLG-3 (not included), see below.</b><br/><b>RemCTRL not included - see below</b></p> | <p>UHP-F-3-WL<br/><br/>(WL = 365, 385, 405, 455, 520, 630, HCRI, W57, W65)</p> |
| <p>Liquid Light Guide (LLG-5) Coupled Ultra-High Power LED for microscopy and various illumination applications.<br/>Please specify wavelength or<br/>HCRI – for White HCRI 5700K,<br/>W57 – for White 5700K,<br/>W65 – for White 6500K)<br/>Power adaptor is included.<br/><b>Compatible only with Prizmatix LLG-5 (not included), see below.</b><br/><b>RemCTRL not included - see below</b></p> | <p>UHP-F-5-WL<br/><br/>(WL = 365, 385, 405, 455, 520, 630, HCRI, W57, W65)</p> |
| Prizmatix Light-guide, core diameter 3mm<br>tip dimensions: OD=Φ5mm, L=20mm                                                                                                                                                                                                                                                                                                                        | LLG-3                                                                          |
| Prizmatix Light-guide, core diameter 5mm,<br>tip dimensions: OD=Φ7mm, L=20mm                                                                                                                                                                                                                                                                                                                       | LLG-5                                                                          |
| Optional wired remote control unit for manual control of the UHP-F illuminator. Cable included.                                                                                                                                                                                                                                                                                                    | RemCTRL                                                                        |
| 3mm core Liquid Light Guide (LLG-3) collimator. 1 inch output. No XY adjust                                                                                                                                                                                                                                                                                                                        | LLG-AC3                                                                        |
| 5mm core Liquid Light Guide (LLG-5) collimator. 1 inch output. No XY adjust                                                                                                                                                                                                                                                                                                                        | LLG-AC5                                                                        |
| XYZ adjustable Collimator for LLG-3 Light Guide.<br>Please specify N for Nikon / O for Olympus / Z for Zeiss / L for Leica microscope type                                                                                                                                                                                                                                                         | LLG-C3-Type<br>(Type = N / O / Z / L)                                          |
| XYZ adjustable Collimator for LLG-5 Light Guide.<br>Please specify N for Nikon / O for Olympus / Z for Zeiss / L for Leica microscope type                                                                                                                                                                                                                                                         | LLG-C5-Type<br>(Type = N / O / Z / L)                                          |

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