

Prizmatix

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 I²C 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 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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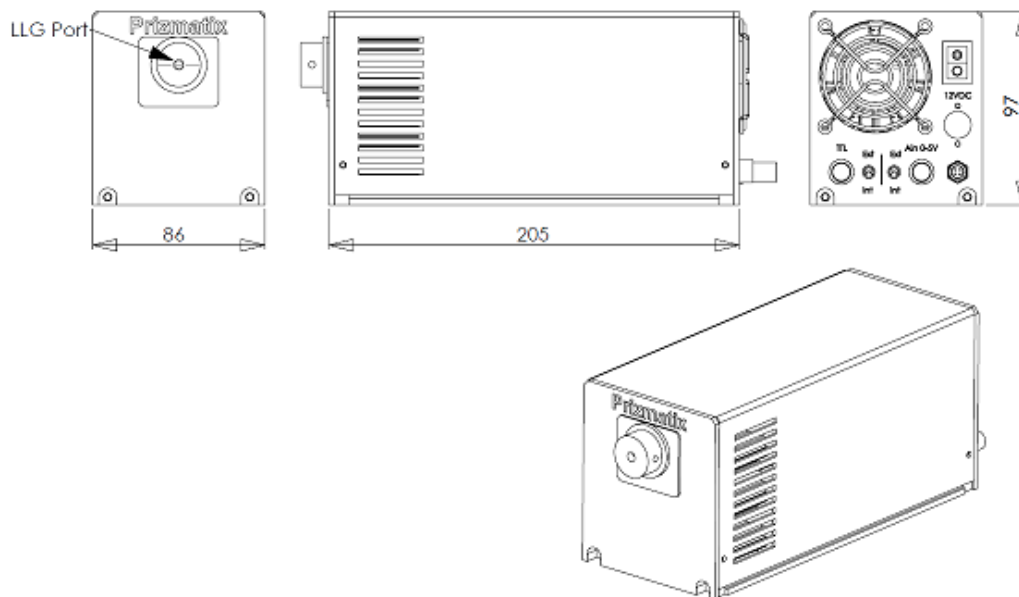
Electrical Specifications

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

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. Please specify wavelength or HCRI – for White HCRI 5700K, W57 – for White 5700K, W65 – for White 6500K Power adaptor is included. Compatible only with Prizmatix LLG-3 (not included), see below. RemCTRL not included - see below</p>	<p>UHP-F-3-WL (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. Please specify wavelength or HCRI – for White HCRI 5700K, W57 – for White 5700K, W65 – for White 6500K Power adaptor is included. Compatible only with Prizmatix LLG-5 (not included), see below. RemCTRL not included - see below</p>	<p>UHP-F-5-WL (WL = 365, 385, 405, 455, 520, 630, HCRI, W57, W65)</p>
Prizmatix Light-guide, core diameter 3mm tip dimensions: OD=Φ5mm, L=20mm	LLG-3
Prizmatix Light-guide, core diameter 5mm, 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. Please specify N for Nikon / O for Olympus / Z for Zeiss / L for Leica microscope type	LLG-C3-Type (Type = N / O / Z / L)
XYZ adjustable Collimator for LLG-5 Light Guide. Please specify N for Nikon / O for Olympus / Z for Zeiss / L for Leica microscope type	LLG-C5-Type (Type = N / O / Z / L)

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Optical Specifications

Product P/N	Peak λ [nm]	Centroid [nm]	FWHM [nm]	Color Temp [K]	Power LLG3 [mW]	Power LLG5 [mW]
UHP-F-WSS	-	-	-	8500	2600	3700
UHP-F-WDS	-	-	-	5665	2500	3500
UHP-F-WDH	-	-	-	6000	2500	3700
UHP-F-WCS	-	-	-	6500	2400	3300
UHP-F-HCRI	-	-	-	5700	1200	2000
UHP-F-940	955	940	52	-	1800	3100
UHP-F-850	859	853	34	-	1600	2800
UHP-F-780	788	782	35	-	1200	2200
UHP-F-730	731	726	35	-	750	1900
UHP-F-630	629	626	22	-	1000	2000
UHP-F-560	560	570	97	-	1800	2700
UHP-F-545	545	545	98	-	2700	3700
UHP-F-525	525	528	42	-	650	1300
UHP-F-455	453	456	25	-	3000	5900*
UHP-F-405	404	406	14	-	2800	6000*
UHP-F-385	385	387	13	-	2900	6100*
UHP-F-365	369	372	15	-	2800	6000*
UHP-F-310	309	312	16	-	130	160
UHP-F-275	274	275	13	-	58	63
UHP-F-275	274	275	13	-	58	63