

# Prizmatix

---

## Black-LED-630 Fiber Coupled RED LED Light Source

### Introduction

The new compact fiber-coupled high power Red LED light source module at **630 nm** is an effective replacement of lasers and lamps in many applications, such as spectroscopy and inspection and component testing. This new member of the modular OptiBlocks family provides up to **18 mW** of CW power at fiber output (2000micron core POF fibers). The LED driver supports CW or external TTL modulation with user controllable frequency and duty cycle.



### Features

- High Power
- Speckle free
- LED spectrum can be narrowed by optional band pass filter
- Compact and robust head: 50mm x 50mm x 40mm
- Reciprocal SMA, FC or ST fiber connection
- TTL external modulation
- Precisely adjustable power
- Long life (no lamp or laser tube replacement required)

### Replacement of

- He-Ne red lasers
- Red Diode lasers
- Lamps

### Applications

- Spectroscopy
- Fluorescence excitation Alexa Fluor 633, 635, Cy5, SYTOX Red,
- Bio analysis
- Component test and inspection

---

#### Prizmatix Ltd

16 Or-Hahaim St., P.O.B. 4164  
Modiin-Ilite 71919, Israel  
www.prizmatix.com

#### Main Office

Phone: +972-8-929-7844  
Fax: +972-8-929-8772  
sales@prizmatix.com

#### North America Sales Office

Phone: +1-(248)-436-8085  
Fax: +1-(248)-281-5236  
sales.usa@prizmatix.com

# Prizmatix

## Specifications

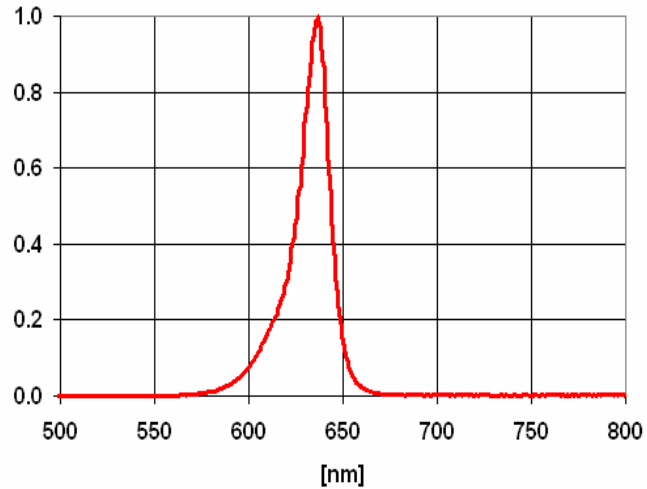
**Peak wavelength:** 635±5 nm Typ.

**Centroid:** 630±5 nm Typ

**Spectrum half width:** 20 nm Typ.

### Power output:

Black-LED power output is limited by the reciprocal fiber characteristics. Larger core and higher NA will increase maximum power output, and vice versa.



The table below shows a few examples of the CW output power at different fibers:

Fiber brand	Fiber type <sup>*1</sup>	NA	Fiber Core Diameter	Output Power Typ. <sup>*2</sup>
Mitsubishi Rayon Super Eska SH8001	POF	0.5	2000 µm	18 mW
Mitsubishi Rayon Super Eska SH6001	POF	0.5	1500 µm	15 mW
Mitsubishi Rayon Super Eska SH4001	POF	0.5	1000 µm	13 mW

\*1: Fiber length ~ 1 m; POF – Polymer Optical Fiber

\*2: The measurement done by Ophir Nova II power meter equipped with PD300-UV head. The wavelength is set at 630 nm. The values are for non filtered Black-LED-630.

### Optical output connector:

The Black-LED is available with SMA, FC or ST reciprocal fiber connector

### Dimensions:

**Black-LED head:** 50mm x 50mm x 40mm

**Black-LED controller:** 75mm x 40mm x 120mm (W x H x L) without key switch and other extrusions

**Power adaptor:** 60mm x 35mm x 10mm (W x H x L)

---

### Prizmatix Ltd

16 Or-Hahaim St., P.O.B. 4164  
Modiin-Ilite 71919, Israel  
www.prizmatix.com

### Main Office

Phone: +972-8-929-7844  
Fax: +972-8-929-8772  
sales@prizmatix.com

### North America Sales Office

Phone: +1-(248)-436-8085  
Fax: +1-(248)-281-5236  
sales.usa@prizmatix.com

# Prizmatix

---

## Benchtop LED Current Controller

### Introduction

The Benchtop LED current controller has been designed to provide precisely controllable, low noise current for driving a variety of LEDs. The current controller can be configured to drive virtually any currently available LED including the high power LEDs, in constant current (CW) or chopping mode defined by external TTL input.



### Features

- Constant current or chopping modes
- Precise LED current setting
- Safety features for HP and UV LEDs
- TTL external modulation
- Compact and robust enclosure

### Specifications

**Output current control range:** 0-1000 mA

**Output voltage:** 1-15 V

**Chopping frequency:** DC – 10 KHz

**Connector for LED:** 9-pin D-type

**Connector for TTL input:** BNC

**Input power supply:** 24 VDC, 1 A

**Power adaptor input:** 100-240 VAC, 1 A, 47-63 Hz

**Dimensions:**

**Controller:** 75mm x 40mm x 120mm (W x H x L) without key switch and other extrusions

**Power adaptor:** 60mm x 35mm x 10mm (W x H x L)

---

#### Prizmatix Ltd

16 Or-Hahaim St., P.O.B. 4164  
Modiin-Ilite 71919, Israel  
www.prizmatix.com

#### Main Office

Phone: +972-8-929-7844  
Fax: +972-8-929-8772  
sales@prizmatix.com

#### North America Sales Office

Phone: +1-(248)-436-8085  
Fax: +1-(248)-281-5236  
sales.usa@prizmatix.com