

BLS-SERIES HIGH-CURRENT LED DRIVERS WITH MANUAL & ANALOG-INPUT CONTROLS AND TOOL-FREE CONNECTORS

(PART NUMBERS: BLS-13000-1, BLS-13000-1E, BLS-18000-1, BLS-27000-1)

Mightex BLS-13000-1, BLS-13000-1E, BLS-18000-1 and BLS-27000-1 LED controllers are designed for driving Mightex Type-H Super High Power LED Sources. The controllers have two operation modes:

- **Manual Mode:** the output current can be controlled by manually turning the knobs; or
- **Trigger Mode:** the output current can be controlled via an external analog input signal between 0-5V.

The control mode is selected with a slide switch on the front panel, and the factory default is “Manual” mode. BLS-13000-1E, BLS-18000-1 and BLS-27000-1 have a maximum current setting of 13,000mA, 18,000mA, and 27,000mA respectively.

When the controller is set to “Trigger” mode, the output current is fully controlled by the input analog signal (0-5V).

FEATURES

- Dual Control Modes: manual or analog voltage-input controlled
- High output current – up to 27A
- BNC connectors for analog voltage inputs
- Simple, tool-free connections
- Capable of driving variable loads

APPLICATIONS

- Optogenetics
- Fluorescence excitation
- Microscopy
- Testing instruments
- Medical instruments



BLS-13000-1, BLS-13000-1E, BLS-18000-1

(Front Panel)



BLS-27000-1

(Front Panel)



ELECTRICAL SPECIFICATIONS

Parameters	Model				Unit
	BLS-13000-1*	BLS-13000-1E	BLS-18000-1	BLS-27000-1	
Power Supply Input Voltage (DC), Vdc	48	12	12	12	V
Power Supply Input Current (DC)	> 2.5A	> 13.75A			
Maximum Driving Voltage (Vmax)	5.5	7.5			V
Current Accuracy	±3%				mA
Maximum Driving Current (Imax)	13	13	18	27	A
Channel Output Power Limit (Pmax)	< 72	< 95	< 135	< 135	W
Channel Frequency Response	< 3				KHz
External Analog Input	0 ~ 5				V

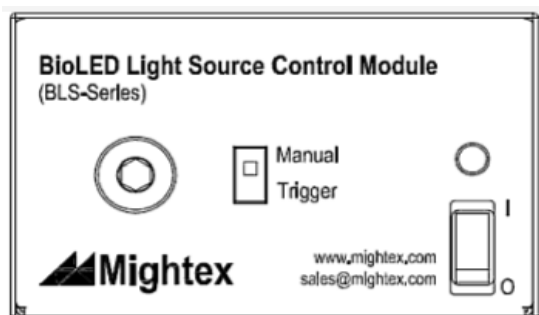
Note: 1) Spec for legacy support. BLS-13000-1 has been discontinued and replaced by BLS-13000-1E; 2) If the channel output voltage is V_d and the output current is I_d , they must simultaneously satisfy: (1) $V_d \leq V_{max}$; (2) $I_d \leq I_{max}$; and (3) $V_d * I_d \leq P_{max}$.

MECHANICAL SPECIFICATIONS

Dimensions:	221mm (L) x 156mm (W) x 96mm (H)
Weight:	1300g

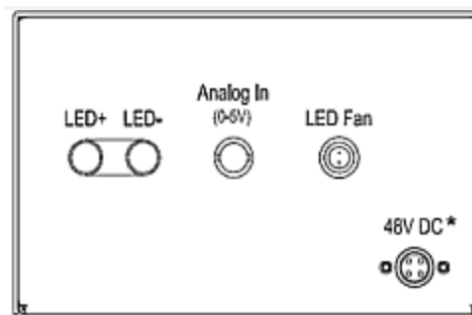


FRONT PANEL AND REAR PANEL (BLS-13000-1, BLS-13000-1E AND BLS-18000-1):



Front Panel

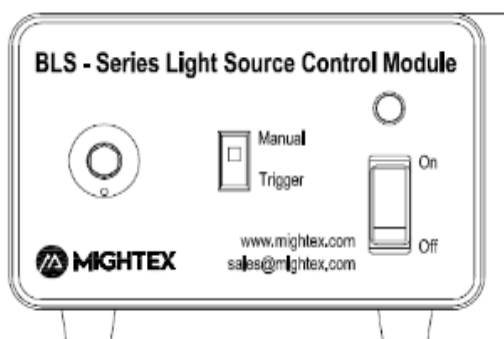
The Front Panel has a power switch and a power indicator. Each channel has its own slide switch (for selecting Manual or Trigger mode) and a turning knob (for adjusting output current).



Rear Panel

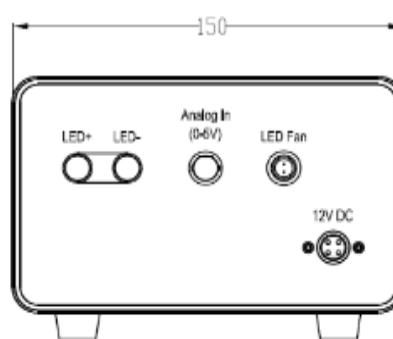
The Rear Panel has a DC input plug. LED+ and LED- connectors for LED power. A BNC connector for external trigger/analog voltage signal. 12V DC output (2-pin Aero connector) for the LED cooling fan.

FRONT PANEL AND REAR PANEL (BLS-27000-1):



Front Panel

Front Panel has power switch and power indicator. It also has a slide switch (for selecting Manual or Trigger mode) and a turn-counting dial (for adjusting output current).

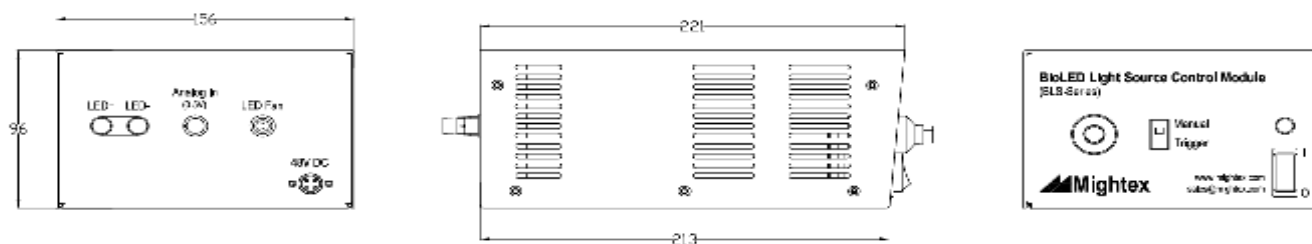


Rear Panel

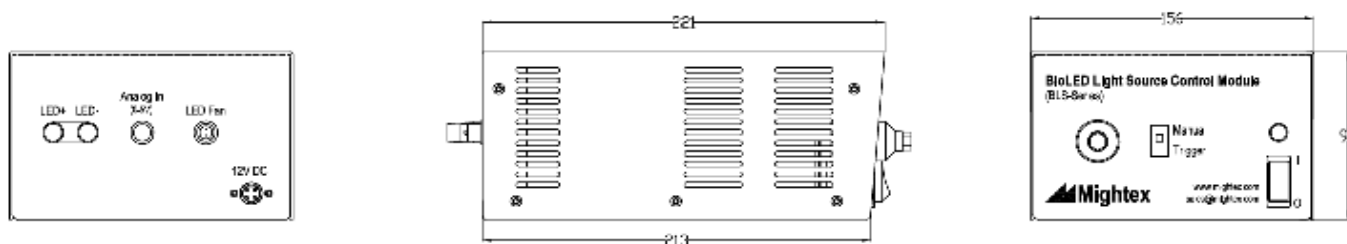
The Rear panel has a DC (12V) input plug, and it also has a BNC connector for analog input (0-5V), a two pin LED Fan aero connector to drive the fan of the LED light source, and a pair of LED+/LED- to drive the LED light source.



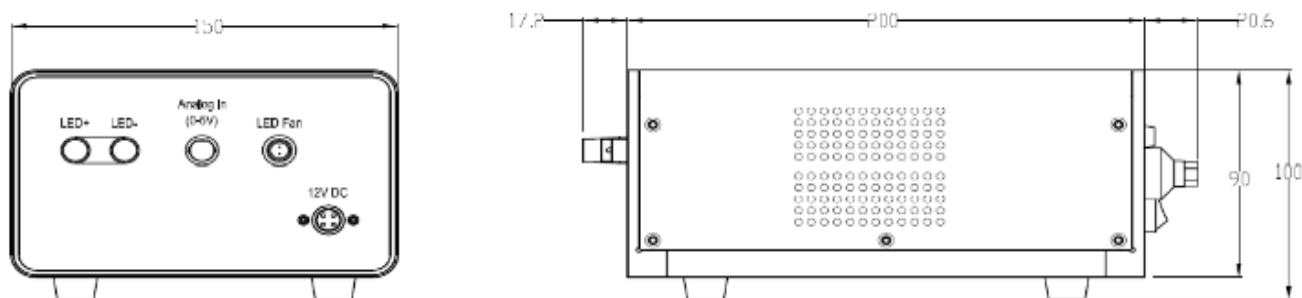
INSTALLATION DRAWING



BLS-13000-1, BLS-13000-1E



BLS-18000-1



BLS-27000-1



ORDER NOW

Our primary goal is to help you find the optimal solution for your application. We have a dedicated technical support and sales team committed to providing guidance on our spectrometers and other Mightex products.

With a world-class OEM design team, Mightex offers a broad range of customized solutions in order to meet individual customer's unique requirements. Please call [1-925-218 1885](tel:1-925-218-1885) or email sales@mightex.com for details.



PRECISOMETER | **European Distributor of Mightex**

Official Mightex Partner for Benelux & Europe: Consultation, Quotes & Warranty

European Office & Lab: Precisometer (Wfront Principle B.V.) · Eisingastraart 9, Noordwijk, NL · info@precisometer.com

Explore Products, Request Quotes & Configure Online: <https://www.precisometer.com/mightex>

Please visit www.mightexsystems.com
for more information!

CONTACT US

US OFFICE

1241 Quarry Lane, Suite 105
Pleasanton, CA 94566
USA
TEL: 1-925-218-1885

CANADA OFFICE

200 Consumers Road, Suite 805
Toronto, ON M2J 4R4
Canada
TEL: 1-416-840-6115

