



5000B-100 Series Multi-channel LED Driver/Controllers



Innovations in Optics offers the 5000B-100 OEM driver with Ethernet and serial connectivity to independently drive, control and modulate as many as 20 different LED sources. The driver provides constant current control up to 3A per LED to achieve optimal performance and lifetime of a chip-on-board die array.

The 5000B-100 driver offers the ideal approach of providing one current source for each and every die to assure uniform drive current throughout a densely packed COB array. Having each die powered individually prevents current hogging, thermal runaway and catastrophic failure within the array.

Features:

- Continuous mode or pulsed
- 2 microsecond pulses
- USB 2.0 and 10/100 Mbps Ethernet
- Temperature sensors
- External trigger

Options:

- From 4 to 20 drive channels

Compatible Products:

- LumiBright™ UV DMD Illuminators
- LumiBright SolarSim™ for Solar Simulation
- Multi-wavelength LumiBright LE Light Engines

Typical Applications:

- Direct Imaging
- 3D Printing
- Testing Photovoltaics
- Fluorescence Microscopy



5000B-100 SERIES 4-20 CHANNEL DRIVER/CONTROLLERS
SPECIFICATIONS

Parameter	Specification	Comment
Type	Constant current, dimmable	4 - 20 channels
Output Current	0.3 to 3.0A DC	Per channel, common anode (off state, enable at 0)
Output Voltage	1.2 to 6.0 V DC	Per channel, anode ground
Input Voltage	+24 VDC @ 14A max	+/-5%
Efficiency	80% minimum	At maximum load
Current Ripple	0.5% RMS maximum	At maximum voltage (5.5V DC)
Over Temperature Sensors	In both source and driver	LED Status indicators (local)
Operating Modes	Continuous Mode (CM) or Pulsed Mode	User selectable
Dimming	Analog: 100% down to 10% PWM : 100% down to 0.05%	Local or Remote
External Trigger	Instantaneous or with programmable delay	User enabled
LED module I/O	Thermistor, 2 photosensors	Monitoring or feedback loop
Pulse Repetition Rate	30 kHz	Maximum
Pulse Width	2 µsec	Minimum
Connectivity	USB 2.0	Standard-A type
	10/100 Mbps Ethernet	RJ-45
Size and Weight	130 X 75 X 75mm, ~500 grams	

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