

G-Series G180 LED FOR LIGHT GUIDE ILLUMINATORS

OVERVIEW

The G180 offers high brightness, tunable correlated color temperature (CCT) and adjustable intensity in a compact, flexible, and convenient package. Different colored LED chips packed into our Dense Matrix LED™ Array couple light efficiently into a light guide, illuminating your sample with selectable colors to enhance contrast, protect wavelength sensitive samples, and optimize viewing comfort. Undesirable light and sample interactions such as photobleaching in fluorescence and unintended curing in photosensitive adhesives can be avoided by selecting a color channel that does not interact with the sample. Eye fatigue, often caused by sustained viewing over long periods of time when performing visual inspection, can also be minimized by selecting the appropriate CCT.

The G180-TW (Tunable White) has six selectable CCTs from 2700K to 6500K, plus two user-programmable settings. The G180-RGB has three individual single-color channels, Red (at 635nm), Green (at 515nm) and Blue (at 475nm), in addition to three CCT whites and two user-programmable settings. The G180-5600K is not color tunable. Different color configurations can also be built to order. Available in either a table top or space saving pole mount configuration, the G180 can be readily adapted to your application. Furthermore, the pole mount model can be mounted either vertically or horizontally and can be automated and synchronized with other hardware via USB or external triggering, making it a great fit for automated production lines and robotics. External trigger inputs enable <2msec shuttering times for strobe and pulse applications. The ScopeLED G180 combines power, flexibility, and usability in a compact form and is a great choice for your application. ScopeLED provides optional light guides and ring lights for a complete illumination system.

Applications include machine vision, visual inspection, forensics, biology, and microscopy.

FEATURES

- Selectable colors:
 - G180-TW: 2700K, 3000K, 3600K, 4300K, 5600K, 6500K, plus two user-programmable settings
 - G180-RGB: 3000K, 4300K, 5600K, 635nm, 515nm, 475nm, plus two user-programmable settings
 - G180-5600K: 5600K Fixed CCT
- External control via USB or triggered input for automation and synchronization
- Optional universal fiber mounting adapter compatible with most light guides
- Bright and efficient Dense Matrix LED™ Array optimized for light guides
- <2msec ON/OFF switching times using External triggering
- Software controllable via μManager or ScopeLED software
- Stable output at all intensities and colors
- Table top and pole mount configurations
- Minimal heat and quiet operation
- No UV or IR emission radiation
- Modern, space saving design
- Simple to use manual control
- 30,000 hours of LED lifetime



OPTICAL PERFORMANCE

5600K Fixed CCT

Typical CCT/Color Settings	8mm Light Guide	
	Radiant Flux (mW)	Luminous Flux(Lm)
5600K	1280	400

Tunable White

Typical CCT/Color Settings	8mm Light Guide	
	Radiant Flux (mW)	Luminous Flux (Lm)
2700K	450	120
3000K	510	135
3600K	690	190
4300K	930	260
5600K	740	205
6500K	660	185

Mixed RGB and Tunable White

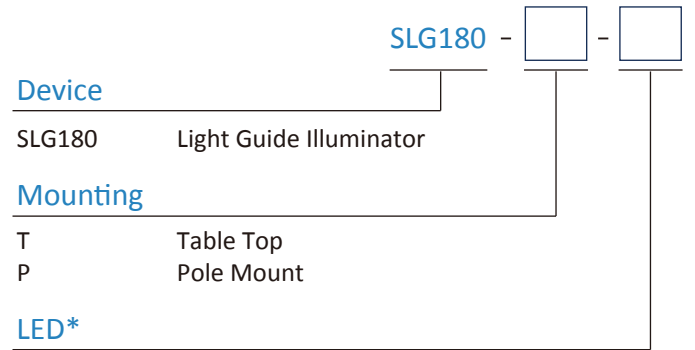
Typical CCT/Color Settings	8mm Light Guide	
	Radiant Flux (mW)	Luminous Flux (Lm)
3000K	340	85
4300K	410	95
5600K	450	105
Red @ 635nm	200	30
Green @ 515nm	140	65
Blue @ 475nm	250	30

* Results were measured at the output of a 1 meter long, 8 millimeters light guide and may vary based on a number of optical conditions.

SPECIFICATIONS/RATINGS

Supply Voltage	10.8V to 13.2V
Input Current	3.5A max
Maximum Power Consumption	46W
Operating Temperature	0°C to 40°C
Storage Temperature	-20°C to 75°C
Humidity	10% to 90%
CCT and Color Settings	2700K, 3000K, 3600K, 4300K, 5600K, 6500K, 635nm, 515nm, 475nm
Model Weight: Table Top	1.7 lbs
Model Weight: Pole Mount	1.4 lbs

ORDERING INFORMATION



LED*

5600K	5600K Fixed CCT
TW	Tunable White Light
RGB	Red, Green, and Blue

Accessories (Optional)

SLAG-BASE	Lead Base for utilizing the Rigid Gooseneck Lightguides for Stability
SLAG-BIFR	20-Inch Bifurcated Gooseneck Light Guide with Focusing Lenses
SLAG-PA32	Pole Mount Adapter (40mm to 32mm)
SLAG-PACU	Pole Mount Adapter (40mm to Custom Size)
SLAG-RING	36-Inch Fiber Optic Ring Light
SLAG-SB	Stand Bracket for Mounting to the Back of Non-pole Stereo Microscope Stand
SLAG-SS	Support Stand for Rigid Gooseneck Light Guides
SLAG-EXT15	Extends Warranty on Item for One Additional Year

* Please contact ScopeLED for customized wavelengths or spectrums.

MECHANICAL DIMENSION

Unit: mm [inch]

