

LEDs

Small, Powerful, Reliable

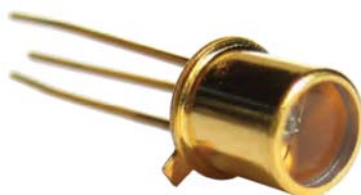
Our Deep UV LEDs are available in a wide range of wavelengths and package sizes. These devices are manufactured using AlGaIn/GaN technology that enables a new generation of High Band-Gap Energy optoelectronics devices with output to 240 nm.

These small UV LEDs consume significantly less power than comparable UV technologies and come in several standard configurations. The Ball Lens is ideal for applications that require a small or focused spot of UV light. Flat and Hemispherical lens options are also available.

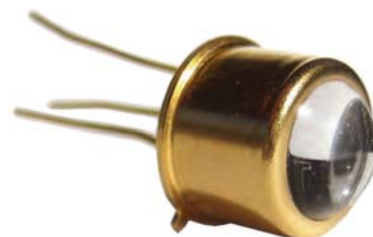
Ball Lens



Flat Lens



Hemispherical Lens



Please contact an Ocean Optics Applications Scientist for ordering information and item codes.

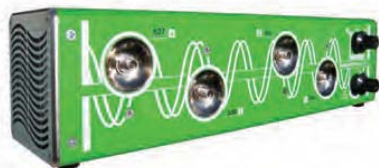
Electro-optical characteristics (UVTOP-280, Ta = 25 °C, Research Grade)

Parameter:	Symbol	Unit	Minimum	Typical	Maximum	Condition
Forward voltage:	VF	V	5.5	7.5	9	IF=20 mA
Reverse current:	IR	μA	100	VR=5V		
Output UV power:	Pout	mW	0.5			IF=20 mA
Peak wavelength:	λp	nm	-10 nm	specified	+10 nm	IF=20 mA
Spectrum half width:	HW	nm	12	20	30	IF=20 mA

Parameter	Unit	Max. rated Value	Ambient Temp.
Power dissipation, DC:	mW	150	25 °C
Forward current, DC:	mA	30	25 °C
Pulse forward current:	mA	200	25 °C
Reverse voltage:	V	6	25 °C
Storage temperature::	°C	- 30 °C - +100 °C	- 30 °C - +100 °C

Multi-Channel LED Light Source

Four-Channel Module with Controller



Our Multi-Channel LED Light Source is designed to power up to four LED modules. The constant current drivers can each drive up to 2 amps continuously or 4 amps at 50% duty cycle. The user-changeable LED modules are automatically recognized and the drive current is adjusted accordingly. This module can work along with or be controlled through its USB interface.

The source has a timing controller that synchronizes the different channels. External events can be adjusted with a resolution of up to 10 ns. The duty cycle and pulse width of the LEDs can be

programmed with great precision up to pulse widths of several seconds. Each LED channel has its own timer and the on/off function of each channel is independently controlled.

Variable triggering modules can be easily configured with Timing Genie Software. Once the timing setups are configured, you can store them onto your unit without the need for a computer.

When specifying a multi-channel LED system, you start with the driver electronics and housing as one component and then assign an LED for each of the channel lines. You'll also select a power supply and power cord.

Specifications

Dimensions:	76.2 mm x 76.2 mm x 298.5 mm
Weight:	1.5 lb. (680.4 g)
Software:	Timing Genie for Windows and Java compatible SDK
PC interface:	USB 2.0
Trigger modes:	External, internal and free-running
Timing resolution:	10 ns
Drive capability per channel:	2.0 amps continuous or 4 amps at 50% duty cycle
LED modes:	Sequential, synchronized and free-running
Analog control resolution:	12 bit