

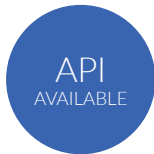
Vega

A unique DC-driven LED light source for all your testing requirements

Vega is a light source developed for high precision measurements of camera systems, including those with extremely short exposure times. It uses LEDs that are driven by DC (direct current) technology making it one of our most sophisticated and unique light sources ever developed.

Main Features

- * DC-driven LED technology
- * Extremely high stability
- * Temperature stability within half a degree
- * Advanced flicker capabilities
- * Sine, triangular, and square waveforms



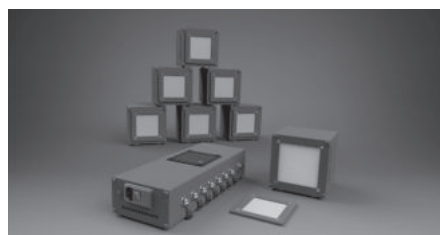
When to utilize Vega?

Vega is best utilized for high-intensity measurements such as contrast detection probability (CDP), modulated light mitigation probability (MMP), noise, and tone curve measurements. These measurements are very beneficial for automotive-grade cameras and other systems with high demands on accuracy.

Vega is available as a starter set that includes one light source, a flicker set with three light sources, and a CDP set with seven sources. Every set comes with a controller and control software.



Vega Starter Set



Vega CDP Set



A Vega test chart

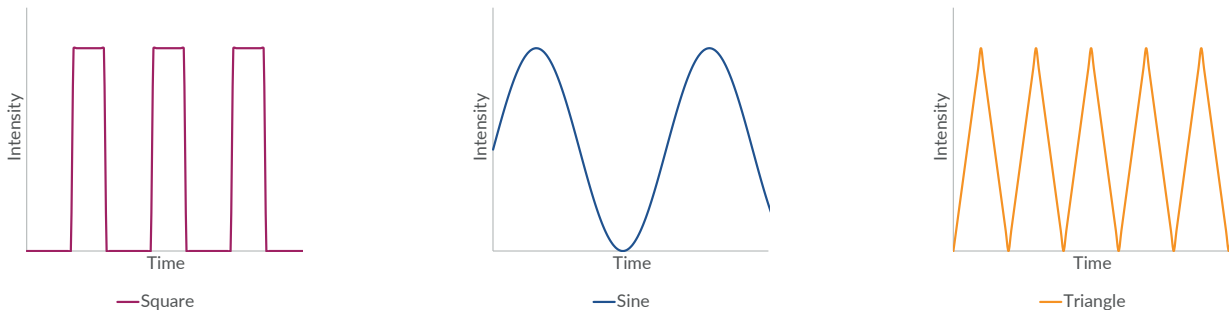
*API sold separately

Why Vega over other light sources?

Unlike PWM-controlled light sources, where intensity is regulated by the high-frequency of switching the LEDs on/off, Vega regulates the intensity by the amount of current. Vega offers 1,000,000 equal-width steps for intensity control. In addition, the DC driver does not affect temperature regulation and can achieve temperature stability within half a degree. The temperature system works both ways (i.e., heating and cooling), and it will remain consistent even when turning on/off different light sources or changing the intensities.

Generate flicker functionality

Vega also has advanced flicker capabilities and can be generated from a more comprehensive frequency range. We have further developed the low-frequency functionality to include sine, triangular, and square waveforms, which allows us to cover nearly all real-world scenarios.



At a Glance	Vega
Principle	Temperature stabilized, DC controlled, dimmable light source
Light sources	36 Temperature controlled LEDs based on iQ-DC technology
Uniformity (active area)	> 95 % (for Intensity > 5%) > 90 % (for Intensity < 5%)
Illumination stability	+/- 0,5 %
Correlated Color Temperature (CCT)	To be specified in final data sheet
Color Rendering Index (CRI)	> 95
Minimum luminance	0,4 cd/m ² (To be specified in final data sheet)
Maximum luminance	38,000 cd/m ² (To be specified in final data sheet)
Dim function	<ul style="list-style-type: none"> • Software based • 10⁶ steps
Flicker frequency range	1 - 1000 Hz (Square) 10 - 500 Hz (Sine) 10 - 500 Hz (Triangle)
Flicker frequency step width	0.1 Hz (1 - 200 Hz) 0.2 Hz (200 - 500 Hz) 0.5 Hz (500 - 1000 Hz)
Software requirements	PC with Windows 10 operating system (or higher) USB port
Functions	<ul style="list-style-type: none"> • Intensity • Frequency • Duty cycle • Mode selection
API (C++)*	Optional

*API sold separately