



Overview

Product name	VEGA
Principle	A temperature-stabilized, DC-controlled, and dimmable light source with versatile flicker functionality

Features

VEGA illuminator

Output window	Square output window 70 mm x 70 mm
Active area	60 mm x 60 mm
Chart	Interchangeable VEGA chart (customizable)
Specialties	<ul style="list-style-type: none"> • Illumination stability • Illumination uniformity • Controllable flicker functionality • Interchangeable, magnetic test charts
Comparability	Combine up to seven VEGA light sources with one VEGA controller.

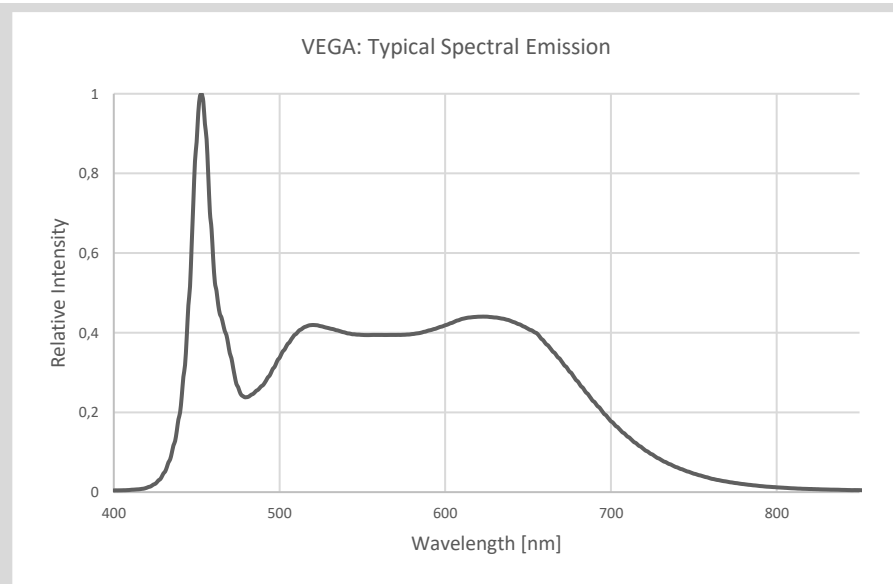
Illumination

Light source	36 temperature-controlled LEDs based on iQ-DC technology
Uniformity (active area)	<p>> 95% at 100% output intensity</p> <p>> 94% at 10% output intensity</p> <p>> 90% at 1% output intensity</p> <p>> 90% at 0.1% output intensity</p>
Illumination stability after startup time	±0.5%
Correlated Color Temperature	4900 K (± 200 K)



Color Rendering Index	> 95
Response time (switch illuminant) *	0.5 s (typical)
Minimum luminance	0.1 – 0.5 cd/m ²
Maximum luminance	55,500 – 61,500 cd/m ²
Dim function	<ul style="list-style-type: none"> • Software-based • 10⁶ - 10 Steps
Startup time	120 s (time until the operating temperature is reached)
Service life	10,000 h
Flicker modes:	<ul style="list-style-type: none"> • Square (LED-Flicker) • Sine • Triangle
Flicker frequency range	1 – 1000 Hz (Square) 10 – 1000 Hz (Sine / Triangle)
Flicker duty cycle range	1 – 99% (Square)
Flicker frequency step width	0.1 Hz (1 – 200 Hz) 0.2 Hz (200 – 500 Hz) 0.5 Hz (500 – 1000 Hz)
Relative inaccuracy of referenced internal luminance sensor	±5% at L > 10 cd/m ² ±10% at L > 1 cd/m ² ±20% at L > 0.5 cd/m ² Not specified at L < 0.5 cd/m ²

Typical spectral emission





Software

System requirements	PC with Windows 10 operating system (or higher) USB port (2.0 and higher)
Functions	<ul style="list-style-type: none"> • Intensity • Frequency • Duty Cycle • Mode Selection • Phase Shift
API (C/C++/Python)	Available as separate options

General description hardware

Power supply / consumption	110 V / 230 V, up to 500 W
Ports (controller)	1 x USB for software control 7 x Power to VEGA light sources 1 x CAN 1 x Test button
Ports (light source module)	1 x Power 2 x CAN 1 x CAN ID Dipswitch 1 x Test button
Light source module size W x H x D	120 mm x 130 mm x 120 mm
Controller size W x H x D	310 mm x 70 mm x 140 mm
Light source weight	1.1 kg
Controller weight	1.9 kg
Operating conditions	Optimal: 22 – 26 °C, maximum: 18 – 28 °C
Scope of delivery	<p>Starter Kit:</p> <ul style="list-style-type: none"> 1 x VEGA light source 1 x VEGA diffuser 1 x VEGA controller 1 x 12 V power cable 1 x 230/120 V power cable 1 x CAN cable 1 x Rugged transport case 1 x Acceptance protocol <p>3 x Kit:</p> <ul style="list-style-type: none"> 3 x VEGA light source 3 x VEGA diffuser 1 x VEGA controller 3 x 12 V power cable 1 x 230/120 V power cable 4 x CAN cable 1 x Rugged transport case 3 x Acceptance protocol <p>7 x Kit:</p> <ul style="list-style-type: none"> 7 x VEGA light source



7 x VEGA diffuser
1 x VEGA controller
7 x 12 V power cable
1 x 230/120 V power cable
7 x CAN cable
1 x Rugged transport case
7 x Acceptance protocol

Extension:

1 x VEGA light source
1 x VEGA diffuser
1 x VEGA controller
1 x 12 V power cable
1 x Acceptance protocol

*Depending on the controlling computer system