

Siteco Vega®

The designer range of LED luminaires
for professional office lighting.

www.siteco.com

**siteco**

The decision for outstanding light

Vega® is an especially high-quality luminaire range for sophisticated applications in office surroundings. With a prismatic plate specifically developed for OSRAM, the luminaire features a new form of intelligent photometrics and luminaire technology further developed for this second generation. This enables the Vega to once again

progress to a new level with its combination of high light quality, appealing design and high efficiency. The luminaire also provides unusually high application flexibility due to versions with DALI, sensor, emergency light, LIGHTIFY® Pro and various mounting methods.



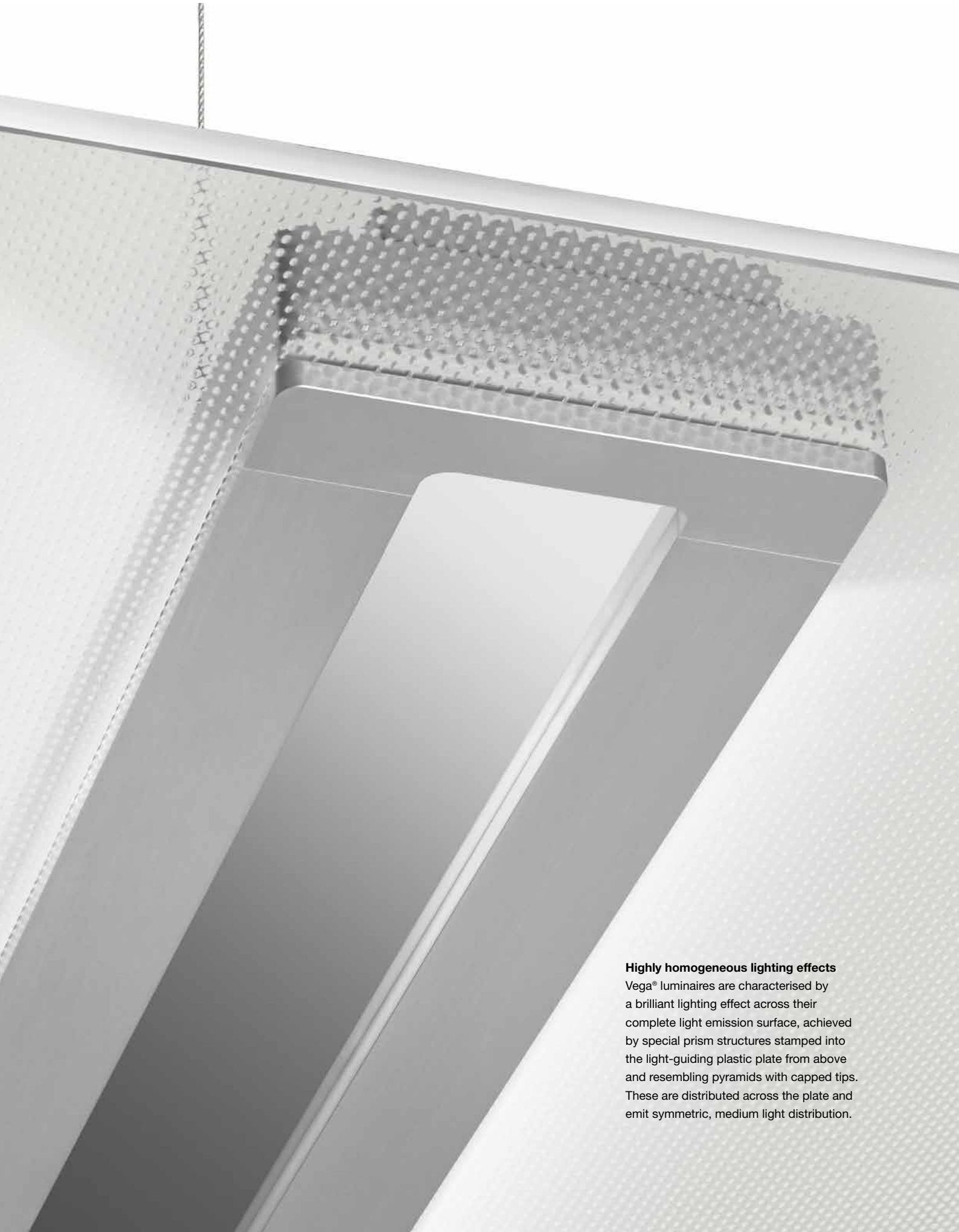


Aesthetic design for modern offices

Innovative LED and lighting technology, an appealing design, high efficiency levels and suitability for computer screen illumination: Vega® has been specifically developed for the modern, successful application of light in classic office environments. Thanks to the special light characteristics and the good glare control, Vega® luminaires can also be placed directly above workplaces. The luminaires have a particular appeal in sophisticated surroundings such as foyers, lounges, reception areas, counters and meeting rooms, as well as educational facilities, schools, libraries and public buildings.

Attractive, diverse and flexible

- Lighting technology developed specifically for the office application sector
- A unique design for sophisticated surroundings
- Direct/indirect components for pleasant room atmospheres
- Lifespan to 50,000 h (L90/B50) with 139 lm/W luminous efficacy
- Several versions – with DALI, with/without sensor technology/wireless control/emergency light functionality, two light colours (3000 K/4000 K)
- Three mounting options – suspended/surface-mounted/system rail



Highly homogeneous lighting effects

Vega® luminaires are characterised by a brilliant lighting effect across their complete light emission surface, achieved by special prism structures stamped into the light-guiding plastic plate from above and resembling pyramids with capped tips. These are distributed across the plate and emit symmetric, medium light distribution.

Innovative technology for superior quality of light

Vega® outshines many other office luminaires thanks to special prismatic structures and other optical highlights used exclusively by SITECO. Directives for offices in

terms of uniformity and glare reduction are optimally fulfilled – meaning that Vega® luminaires are suitable for the illumination of computer screen workstations.

Highly efficient light utilisation

Without prisms, the light coupled into the plate would obey the laws of total reflection and be infinitely diffracted in the plate. Only with a specific design as a disrupter is the light emitted upwards in the form of an indirect light component, or else directed downwards at an angle of $> 40^\circ$, enabling it to emerge as direct light. With the surface-mounted luminaire version, the indirect component can be removed via a special trim. Because light is 'lost' on the path away from the LEDs, more prisms at the edge of the plate ensure that as much light is guided downwards here as in the inner section.



Highly targeted light control

The LEDs couple their light laterally into the illuminated surface, and have special apertures (so-called collimations) that limit the beam angle and guide the light into the desired paths. This form of light control together with the specific prismatic structure ensures compatibility for computer screen workstation illumination.

A sophisticated, filigree design that sets accents

Less elements - more visual appeal

The Vega® catches the eye with its sleek form and prismatic plate with a height of just 6 millimetres, as well as LEDs inserted in the central ridge as the primary element.

The central profile integrating the LEDs and ECG is just 43 millimetres high, giving a highly slender and discreet character. This ensures a lightweight impression and guarantees that the ceiling appearance is not disrupted by additional objects.



On or off: the Vega® sets design accents with its purist, modern looks. In switched-off state, the light-guiding prismatic plate with a height of only 6 mm is practically transparent, and when switched on it appears as a filigree, brilliant light emission surface. This enables Vega® luminaires to blend harmoniously into sophisticated surroundings.



Intelligent control for even more efficiency

Light management systems and daylight control enable lighting according to needs and therefore achieve even more efficiency. All Vega® versions are DALI-capable and can be integrated with simplicity into external light

management systems. In this way, further savings potential can be exploited in addition to high-efficiency LED technology. The extent of this efficiency can be seen in the calculation examples below.

Greater efficiency in all situations

Lighting planning for an open-plan office:
 Office space: 109.25 m² / RH: 2.85 m
 Standard reflection factors: 20/50/70 (floor/ walls/ ceiling)
 Maintenance factor: 0.8 (LED); 0.7 (T16/26)
 Yearly service life: 2750 h
 Illuminance in accordance with DIN EN 12464-1:
 Area of visual task (task area)
 E_m : ≥ 500 lx (ME: 0.75m) / Uniformity U_0 : ≥ 0.6



	T26 system 2x 36 W	T16 system 2x 28 W	Vega® LED 4300 lm/45 W
Nominal illuminance E_m/U_0	510 lx/0.76	508 lx/0.68	520 lx/0.64
Number of luminaires	24	20	12
Rated power	86.5 W	61.5 W	31 W
Total consumption	2076 W	1230 W	372 W
Total consumption W/m ²	19.0	11.3	3.4
Energy consumption kWh/year	5709	3382	1023
CO ₂ consumption, t/year	3439	2038	620
Energy/CO ₂ savings (compared to T26 system without LMS)	0	41%	82%
Energy/CO ₂ savings (compared to T16 system without LMS)	0	0%	69%

Energy/CO₂ savings

compared to T26 system (dynamic - with LMS)



Maintenance factor table

Vega®: 3000K – 4130lm/5360lm and 4000K – 4300 lm/5580lm

Operating duration in 1,000h.		0	5	10	15	20	25	30	35	40	45	50
$T_a = 25^\circ C$	LLMF	1.00	0.98	0.97	0.96	0.95	0.94	0.93	0.92	0.92	0.91	0.90
	LSF	1.00	1.00	1.00	1.00	1.00	1.00	0.99	0.99	0.99	0.99	0.99

Please note:
 Only LED or LED module data are considered when determining luminous flux reduction (LLMF) and total failure (LSF). Total failure references failure of the first components in each case. Unexpected premature failures are not considered. The values specified apply with system operation up until the maximum specified rated ambience temperature $T_{ambient}$. These serve for supporting lighting planners when determining the maintenance factor of indoor LED lighting installations. Warranty claims cannot be derived from the data specified.

Vega® with sensor technology

- Presence detection range with a diameter of up to 2.5 m
- Motion detection with a diameter of up to 7 m
- Daylight control



Vega® with emergency light functionality

- Single battery unit for emergency light functionality acc. to DIN EN 50172 and DIN EN 60598-2-22
- Automatic commissioning of emergency light component
- Self-test function acc. to DIN EN 62034 with control LED
- 3 hour rated operating duration



Flexible mounting for diverse applications

Vega® luminaires can be installed suspended, surface-mounted or via system rails, giving a variety of mounting methods to ideally suit on-site structural conditions.



Suspended variant – with direct/indirect light component
The luminaire is especially filigree with a floating, lightweight appearance thanks to single-point mounting. A discrete canopy functions as almost completely concealed cable strain relief. With an achieved glare reduction of $UGR < 16$ and than 1500cd/m^2 , the suspended Vega® is suitable for illuminating computer screen workstations with maximum visual demands, e.g. for technical drawing applications.

Surface-mounted variant – without indirect light component or with adaptable ceiling illumination
Trims of highly reflective material that reflect back the indirect light component, either completely or partially, can be attached to the upper luminaire surface if required.



System rail variant – with direct/indirect light component

Luminaires can be freely positioned on the discrete system rail that can be partially closed from above. Through-wiring is also possible via the system rail.



Siteco GmbH

Georg-Simon-Ohm-Straße 50

83301 Traunreut, Germany

Tel +49 8669 33-0

Fax +49 8669 33-397

www.siteco.com

Customer Service

Tel +49 8669 33-844

