

A revolution in lighting

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The TEMPURA LED spotlight system opens up new functional and technical lighting applications thanks to its precisely defined light colours and constant luminous flux. Added value is provided by Zumtobel's combined LED expertise and design know-how.

The TEMPURA LED spotlight system by Zumtobel (Dornbirn/Austria) is unique in terms of colour changes. This luminaire was developed jointly with LEDON – the start-up company in the Zumtobel Group – and the Vienna design studio EOOS,

and boasts an appearance characterised by an interesting combination of geometrical shapes, i.e. a round pivoting lighting head flange-mounted on a rectangular gear box, and revolutionary features. The luminaire accommodates





TEMPURA LED spotlight

the innovative “LEXEL™” module in which 24 chip-on-board LEDs are divided up into six clusters.

The TEMPURA spotlight embodies a finely-tuned combination of design, optics, thermal and lighting management. Both brightness and colour temperature can be varied as required incrementally from 2,700 K to 6,500 K. Two control options – manual via a momentary-action switch or by using a DALI signal – provide plenty of scope for various applications. When integrated into a DALI lighting management system, TEMPURA can also be used to program dynamic lighting shows and interplays of colour.

This is how TEMPURA makes it possible to set objects centre-stage with either cool, intermediate or warm white light and precise RGB colours using just one luminaire. The 16° angle of the flood beam pattern can be widened to 25° or 40° by fitting attachment lenses, thus making this exceptional spotlight the perfect choice for a wide range of uses – and with the energy efficiency that is typical of LEDs.

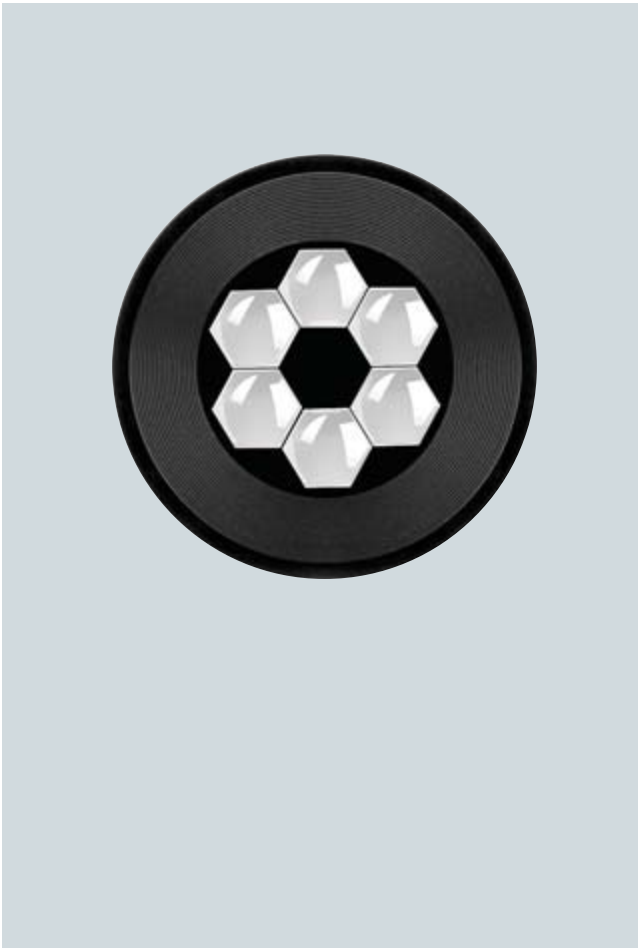
Since LEDs emit neither heat nor UV radiation and are therefore extremely gentle, also from a conservator’s viewpoint, on delicate exhibits or precious merchandise, TEMPURA really comes into its own in museums and shops. It is now simple to achieve bright, attractive centre-stage settings for sensitive objects and materials without risk of permanent damage.

Thanks to excellent thermal management and intelligent control technology, the LEDs in the “LEXEL™” module ensure an absolutely constant luminous flux of 1,000 lumens – equivalent to a 100 W low-voltage halogen lamp – with a service life in excess of 50,000 hours. This extraordinary spotlight offers all this plus two times less energy consumption. High lighting quality, energy efficiency and freedom from maintenance are other outstanding features of this LED spotlight.

With TEMPURA, Zumtobel has made the leap from purely decorative to functional, technical LED lighting. This innovative technology can now be used to implement classic lighting tasks, opening up additional attractive potential applications for users because of the specific characteristics of LEDs.

Light emitting diodes – fascinating light sources

With its unique features, the TEMPURA spotlight is further proof of Zumtobel’s competence as a leading international supplier of integral lighting solutions for an extremely wide range of application areas. A fine-tuned combination of technology, design, emotion and energy efficiency results in high-quality products and systems that enable light to reveal its distinctive creative power to full effect, in interplay with space and architecture. Openness to new developments and innovative technologies are a basic prerequisite for trend-setting lighting concepts, for instance concepts that use LEDs.



TEMPURA LED spotlight

Zumtobel was one of the first luminaire manufacturers to identify the potential of these modern solid-state light sources and has included LED luminaires in its diverse portfolio of products for architecturally sophisticated lighting tasks since 2000. This product range has been consistently adapted and extended to keep pace with further development of LED technology. It continues to be a technically fully developed product line for indoor and outdoor areas that opens up fascinating prospects for using new lighting technology.

All models share the same LED-specific characteristics – low energy consumption, long service life, freedom from maintenance, resistance to vibration and impact, and no ultraviolet or infrared radiation. The range includes round and square recessed luminaires, lighting tiles, light lines and lighting tubes as well as spotlights – ideal for creating interplays of coloured points of light. These creative Zumtobel products provide impressive lighting accents in shops and museums, room settings that are full of atmosphere for hospitality and wellness and safe visual guidance on paths, underground car parks and in cinemas.

Although the initial emphasis was primarily on setting the stage, accent lighting and helping people find their way around by using defined colours and dynamic colour sequences, rapid improvements in luminous efficiency and lighting quality – especially where white light is concerned – mean that LEDs are now increasingly widely used for general lighting. Zumtobel is catering for this trend by developing new LED luminaires and intelligent lighting management systems that are tailor-made to suit specific requirements in highly different application areas. LEDs are perfect for decorative lighting, functional technical lighting or emergency lighting: creatively designed Zumtobel LED products and LED systems that use compact light sources provide guaranteed benefits to users.



SYTEMLED functional LED light line modules



LEDOS WALL II



BASIC LED



PASO II

All-rounder for a wide variety of application areas

This is impressively exemplified by the LED solutions that were on show at Light+Building 2006, which perform not only decorative but also technical functional tasks excellently. Versatility combined with aesthetic design and innovative technology are distinctive features of Zumtobel's LED portfolio. For instance, **SYTEMLED functional LED light line modules** with IP40 or IP65 protection and white, blue or variably coloured RGB light are ideal for use as a decorative ribbon of light or to accentuate vertical areas, both indoors and outdoors.

The **LEDOS WALL II** recessed LED luminaire with a prominent diffuser, enclosed in a luminaire frame made of brushed special steel or highly specular chrome that is one of its distinctive features, produces unique lighting effects that never fail to surprise. Homogeneous white or blue light or an exciting interplay of colour can be used as a design tool or to provide a room atmosphere that boosts motivation.

Recessed flush in the floor, **BASIC LED** and **PASO II** lighting tiles show the way, ensure safety or cleverly set architectural elements centre stage. IP67 protection provides added value for coloured accent lighting in outdoor areas or for a feel-good atmosphere, e.g. in wellness areas.

Although these beautifully designed Zumtobel LED products are all very different, they do have certain things in common – easy installation and handling, and an innovative electronic control system. This ensures, firstly, that the intrinsic advantages of LEDs such as energy efficiency, long service life and low maintenance really make themselves felt. Secondly, the luminaires and their compact light sources really look good when integrated into lighting management systems.



ORILED

Functionally optimised

The various recessed versions of the **ORILED** visual guidance luminaire are an excellent example of this. Thanks to application-specific control gear for switchable and dimmable/switchable lighting solutions, these luminaires can be integrated into all lighting control systems that have digital interfaces such as SwitchDIM, DSI and DALI or DMX interfaces or an analogue 1...10-V-interface.

Fitted with appropriate emergency lighting control gear and maintenance-free NiMH batteries, ORILED can also be used for emergency lighting. The switchable, dimmable versions with a nominal operating duration of 1 hr or 3 hr are perfect for illuminating escape routes, among other tasks, providing the illuminance and light distribution required in DIN EN 1838.

Zumtobel luminaires embody a fascinating combination of LED and design expertise. Their outstanding features include user benefits and innovative technology in both decorative and technical functional application areas.