

- RGBA offers an extra-large colour gamut versus conventional RGB colour-mixing technology
- RGBW provides RGB colour-mixing, with the addition of a white channel to provide a higher maximum lumen capability
- Hi-CRI Vari-CCT enables one device to provide a very high quality light source (Ra>90) at a range of CCTs from 3000K to 6500K.

With optical and thermal solutions designed in parallel, and in-built optical feedback at the array level to ensure consistent performance through-life and product-to-product performance, the QUATTRO Mini is a very powerful enabler for smart, efficient, high-quality lighting solutions in the architectural, retail, commercial and entertainment lighting sectors, such as high-power PAR Lamp replacement, floodlights, spot lights, and stage/theatre spotlights.

Hall 4.2 Walkway: J Booth: 60 ■

LEDworx Debuts with LED-Streetlight

LEDworx GmbH (LEDworx), a European innovator of LED lighting systems and technologies, enters its 6th year of developing on applications for High-Power-LED illuminants, focusing on streetlights.

Based upon its experienced knowledge over the last years, LEDworx finalized the development of a mass producible LED-Streetlight named FALCON.

"We focused on developing a mass series product, applicable to all purpose - from sidewalks to highways." said Franz Witthalm, CEO, LEDworx.

LEDworx expects a revolutionary change in general street lighting. Well known, that there have been similar applications of different companies all over the world, the FALCON-product line is expected to be the first mass produced all-purpose LED-Streetlight.

"There has been enormous interest from all over the world, since the rumours about our new project were afloat. Especially European, in particular Austrian and German companies and governmental communities, as well as US-companies and governmental organisations joined the wait list for the first deliveries." said Andreas ROMAN, Sales Manager, LEDworx.

The construction of LEDworx' newest development is based on a modular concept. The LED-Power-output from 40 to 200 Watt is user-defined expandable. Both the electronic design and the LEDworx thermal management system are designed for applying the latest High-Power-LEDs coming into the market, from LedEngin to Cree.

After LEDworx' test installations of LED-Streetlights named Hawk-Eye in Dubai in 2006, it was just a matter of time, when the next development step to a mass-producible LED-Streetlight would be presented to public. The presentation of the latest generation of LEDworx' technically improved "FALCON" - will take place at the Light&Building trade fair.

Hall: 5.01 Walkway: B Booth: 86 ■

10 Watt, 900 Lumen Z-Power P7 Series

The 10W P7 single LED package produces luminous flux of 900 lumens, much higher than the 60-watt general residential incandescent lamps, which only produce 660 lumens. The Z-Power P7 Series has an efficacy of 90 lumens per watt from a single package, which is eight times higher than incandescent lamps.

The Z-power P7 Series overwhelms incandescent lamps in terms of energy efficiency, a significant development that signals LED's penetration into the general lighting market is just around the corner. Compared to general 60-watt incandescent lamps, which provide an efficacy of approximately 11 lumens per watt, Z-Power P7 Series emits light at 900 lumens and has efficacy of 90 lumens per watt. This breakthrough is happening at a time when rising oil prices and environmental concerns have fueled the interest for energy-efficient systems all around the world.

In addition, the Z-Power P7 Series shows remarkable performance compared to compact fluorescent lamps, which are widely available at most retailers. In a comparison between Z-Power P7 and a compact fluorescent lamp consuming electricity of 15 watts and emitting light at 924 lumens, the compact fluorescent lamp shows an efficacy of 61 lumens per watt, while the Z-Power P7 Series' efficacy is nearly one-and-a-half times higher at 90 lumens per watt.

Another advantage is low light loss rate. General light sources, such as fluorescent lamps and incandescent lamps, emit in all directions and the light loss rate is high. This means that only 60% to 70% of light produced from general light sources is applied to illuminate an object. In contrast, Seoul Semiconductor's Z-Power P7 series is able to focus light in a specific direction based on the users' need. As a result, there is little loss of light generated from the source. Efficacy of the Z-Power P7 Series is almost one-and-a-half times higher than general light bulbs, but when the light loss is considered also, the actual luminous efficacy of the Z-Power P7 Series is nearly two-and-a-half times higher than that of a general light bulb of approximately the same luminous flux.

Seoul Semiconductor's Z-Power P7 Series can be applied in many fields such as general residential lighting, streetlights, a variety of task lights, high-end flashlights for military, police or rugged use, and landscape lighting requiring extremely bright light.

"Development of the 900 lumens, 90 lumens per watt P7 Series is a milestone achievement that reinforces Seoul Semiconductor's leadership position in the global LED industry," said Mr. Kwon, a director of the company's power LED business department. "We will develop new ultra high power products emitting over 1,000 lumens during the third quarter of this year to consolidate and continue advancing our technology."

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