

World's smallest wireless LED lamp unveiled at LIGHTFAIR 2013

April 24 2013



At LIGHTFAIR International 2013 today, Thermal Solution Resources,

LLC (TSR) introduced the world's smallest wireless LED lamp – the intelliSSL MR16 – which can be controlled remotely from iOS, Android or Windows smartphones, tablets or PCs. The intelliSSL lamp incorporates an ultra-compact driver architecture with a powerful antenna system, designed to maximize reception strength, and uses the ultra-low-power JN5168 wireless microcontroller from NXP Semiconductors N.V.. The TSR intelliSSL wireless MR16 lamp will be featured in the NXP booth this week at LIGHTFAIR (no. 2453) and the LEDdynamics booth (no. 100), as well as the ZigBee Alliance booth (no. 3251) as part of a ZigBee Light Link network.

The patent-pending intelliSSL design provides strong wireless reception, eliminating signal interference even under high temperatures, while conforming to a standard ANSI format – 1.98 inches in diameter and 1.98 inches in length – with a GU 5.3 base. A GU 10 base version is planned for release later this year. Compliant with the IEEE 802.15.4 standard for wireless communication, TSR's new wireless MR16 [LED](#) can be used with a wide range of network software stacks, including ZigBee [Light](#) Link, ZigBee Home Automation and JenNet-IP. The intelliSSL smart MR16 LED is ideal for commercial, architectural and outdoor lighting installations, as well as general lighting applications.

"Wireless lighting control is becoming a strategic investment for commercial and residential buildings, with significant ROI in terms of energy savings and total cost of ownership, as well as safety and security," said Mikhail Sagal, president of Thermal Solution Resources. "With the world's first wireless MR16 LED, we've opened a host of new use cases for wireless smart lighting. The flexible, ultra-compact design of the intelliSSL lamp enables wireless LED replacement lamps to be integrated in nearly any type of lighting installation, as well as security systems and devices such as [motion sensors](#), cameras and automated shade controls."

The intelliSSL smart MR16 LED lamp is made with TSR's moduLED design, which eliminates thermal bottlenecks and inefficient assembly steps, while strengthening wireless range and data accuracy. TSR, a design and manufacturing firm for LED lighting headquartered in Rhode Island, offers unique expertise and IP in thermal management, LED lighting design, manufacturing and wireless integration.

"Wireless [smart lighting](#) has been embraced enthusiastically by tech-savvy consumers. Now with the first wirelessly-enabled MR16 from TSR, we expect to see broader adoption, also by businesses, for commercial and architectural lighting installations," said Marcel Walgering, general manager, smart home and energy product line, [NXP Semiconductors](#). "As part of a connected home, smart building or intelligent city network, smart LEDs have the potential to significantly change the way we manage lighting, security and energy consumption on a grand scale."

More information: Links

- intelliSSL by Thermal Solution Resources:
thermsource.com/technology/intellissl/
- NXP JN5168 wireless microcontroller:
www.nxp.com/pip/JN5168

Provided by NXP

Citation: World's smallest wireless LED lamp unveiled at LIGHTFAIR 2013 (2013, April 24)
retrieved 25 April 2024 from
<https://phys.org/news/2013-04-world-smallest-wireless-lamp-unveiled.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.