



VEmesh IoT Extension to DALI Wireless Solution

High Performance Wireless Lighting Control

VEmesh™ IoT Extension to DALI, or in short E2D, is a complete turnkey solution that stands out in complementing LED light upgrade to DALI professional lighting control, while using the VEmesh utmost robust, reliable and flexible Wireless network.

With up to 16,000 DALI Luminaires and sensors per network and 50,000 Networks per single IoT server, E2D is well suited for street, highway, parking lots, large industrial compounds and similar outdoor and indoor modernization, towards users experience comfort and convenience.

To both the users and the contractors, E2D offers an unmatched combination of long-term cost efficiency by DALI interchangeability and fast ROI by deployment productivity and reduced maintenance expenditures.

A unique wireless technology, VEmesh™ that features space, time and frequency diversity, allows E2D to offer the highest possible robustness and resiliency at luminaires' level, together with best RF coverage and farthest range in its class.

VEhub completes the lighting control system with modern network and energy control; alternatively, the customers can easily use instead their own management system hub.

Main Features and Benefits

- **Turnkey modular solution**, including a flexible number of configurations, Gateways, Bridges, Tools and a Hub
- **Wide variety and built-in scalability**, with up to 16,000 Luminaires and Sensors per network and up to 64 per pole, up to 250 collocated Networks and up to 50,000 Networks per single IoT server - expandable
- **Simplest deployment and maintenance**, with Android based tools, such as for commissioning and sniffing
- **Highest range per network**, with 31 hops per network and VEmesh energy summing up in Nodes
- **Interchangeability** using any DALI compliant luminaires and sensors, as well as any suitable cloud management hub
- **Highest operational flexibility**, with no network down for additions and changes of network elements
- **Networks that don't fail**, with highest robustness and resilience by use of space, time and frequency diversity
- **High security** with Frequency Hopping in local networks and high-level encryption in hub connection
- **Most cost-effective system** with savings on internal antennae in Bridges, minimal number of pillars and more.



Bridge



Wireless Gateway



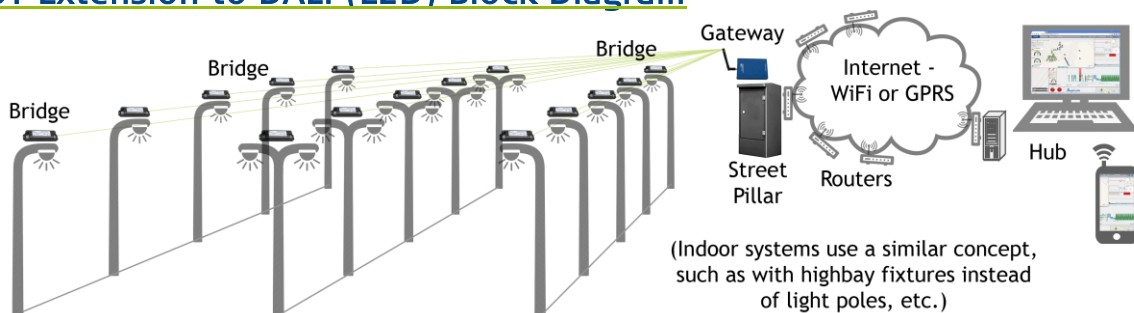
VEtool



Bridge NEMA

VEhub

IoT Extension to DALI (E2D) Block Diagram



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