

DiiA starts D4i certification of LED drivers

D4i certification brings standardization to intra-luminaire DALI, and enables intelligent, data-rich LED luminaires that can interact with external lighting-control networks.

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The Digital Illumination Interface Alliance (DiiA), the global industry organization for DALI lighting control, has started its D4i certification program. D4i brings standardization to intra-luminaire DALI, and extends the existing DALI-2 program by adding a specific set of new features that create new possibilities for DALI in the IoT world. By specifying power-supply requirements and smart-data capabilities, D4i enables intelligent, connected, future-proofed LED luminaires.



Intra-luminaire DALI refers to a small DALI network inside an individual luminaire. D4i specifications ensure that power is available for control devices—such as sensors or wireless communication devices—that are attached to or integrated into the luminaire. D4i-certified LED drivers have an integrated DALI bus power supply, providing power to the DALI bus and to some control devices. In addition, D4i for outdoor luminaires includes auxiliary 24V power supplies for devices with higher power requirements, such as city-wide transceivers.

D4i also enables intelligent luminaires by standardizing the storage and reporting of data relating to the driver, light source and luminaire. The bi-directional nature of DALI enables such data to be communicated with the lighting-control network. Data stored within the driver can be used for enhanced asset tracking, as well as performance monitoring, diagnostics and energy metering.

More information on D4i and the individual power and data specifications can be found on the DiiA website: www.dali2.org/d4i.

DiiA members are now able to certify their D4i LED drivers in a procedure that includes independent verification of test results. Certified products are eligible to carry the new D4i logo, a DiiA trademark which indicates interoperability. The D4i logo trademark can also be used on qualifying luminaires.

D4i certification is also available for stand-alone 24V auxiliary (AUX) power supplies. Control devices—such as sensors and wireless communication devices with a DALI gateway—will be added to the D4i certification program at a later date. All D4i-certified products are listed in the online Product Database.



D4i is aligned with the new ANSI C137.4 standard, and is also compatible with socketed connector systems such as NEMA/ANSI C136.41 and Zhaga Book 18. DiiA and Zhaga are working closely together and have developed the joint Zhaga-D4i certification program for outdoor D4i luminaires that have a Zhaga socket.

About DiiA

The Digital Illumination Interface Alliance (DiiA) is an open, global consortium of lighting companies that aims to grow the market for lighting-control solutions based on Digital Addressable Lighting Interface (DALI) technology. DiiA is driving the adoption of DALI-2, the latest version of the internationally-standardized DALI protocol. DALI-2 includes more product types, more features, clearer specifications, increased testing, and product certification.

The DALI-2 certification and trademark program, operated by DiiA, builds confidence in cross-vendor product interoperability. DiiA develops test specifications for DALI-2 product compliance testing, and also creates new specifications for additional DALI-2 features and functions. The new D4i certification program from DiiA brings standardization to intra-luminaire DALI. For more information, please visit www.digitalilluminationinterface.org.

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