

Zhaga-D4i interfaces, testing, and certification

The Zhaga Part



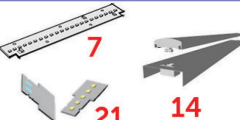

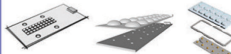


Zhaga – DiiA Webinar

Dee Denteneer

Zhaga





	Office & Industry	Retail & Hospitality	Outdoor
Integrated LED light engines	 14 2,8	 17 16	
LED modules (non-integrated)	 7 14 21	 12 9 5 3,10	 4 15 19
Drivers	 13	 22,23	 24,25
Sensor and communication modules	 20		 18

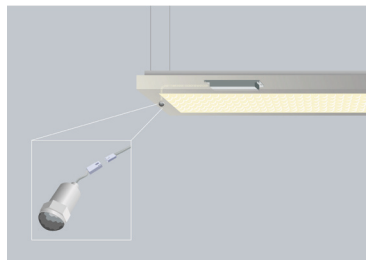
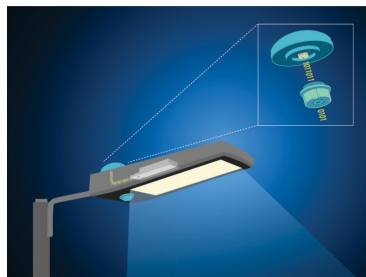
Multi-vendor product interoperability to break barriers for connected lighting

Complementary specifications



**D4i specifications
from DiiA**

DALI Part 250: Integrated bus power supply
DALI Part 251: Luminaire data
DALI Part 252: Energy data
DALI Part 253: Diagnostics data
DALI Part 351: Luminaire-mounted control devices
DALI Part 150: AUX power supply



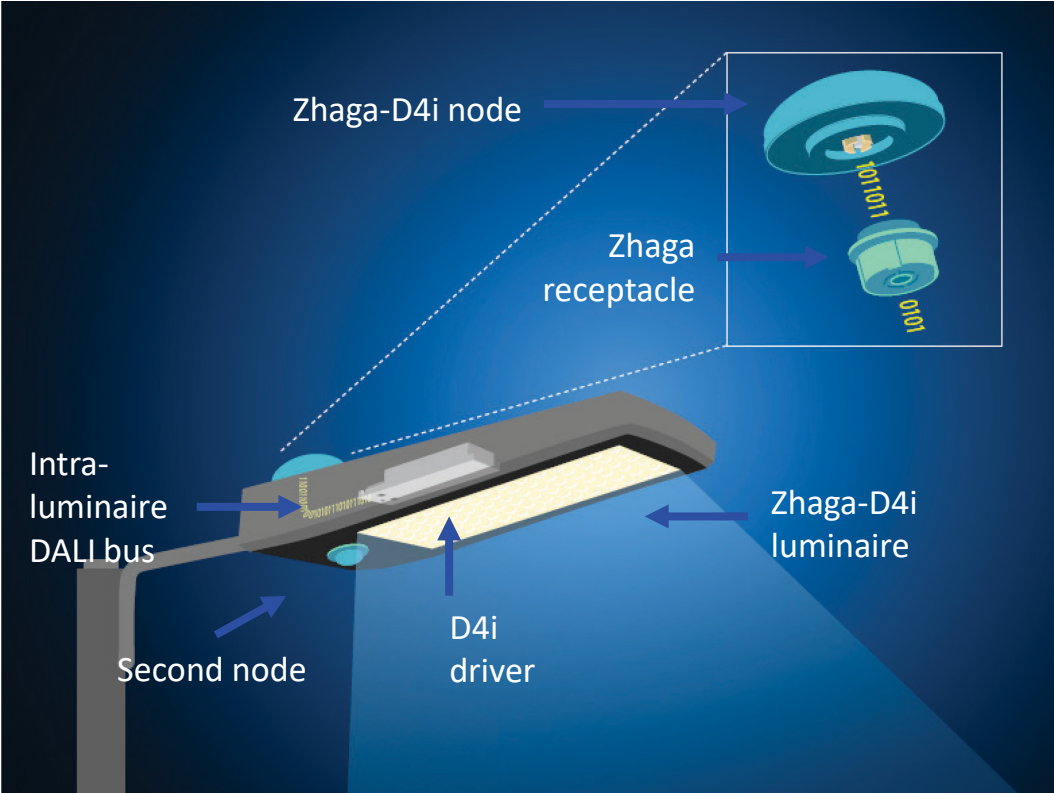
**Book 18 & Book 20
specifications from Zhaga**



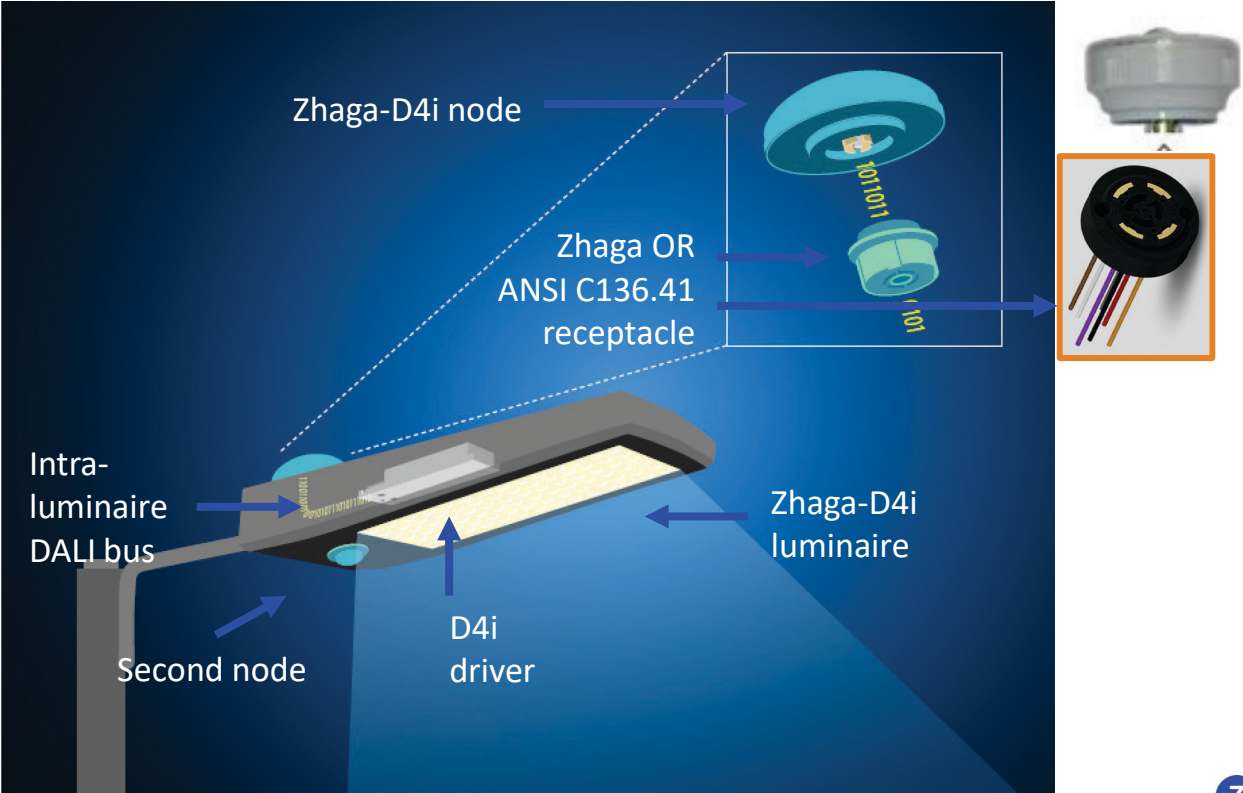
**Book 18 for outdoor:
Book 20 for indoor:**

- Mechanical interfaces
- References to D4i specs for power & control, and luminaire tests
- Electrical pin assignment

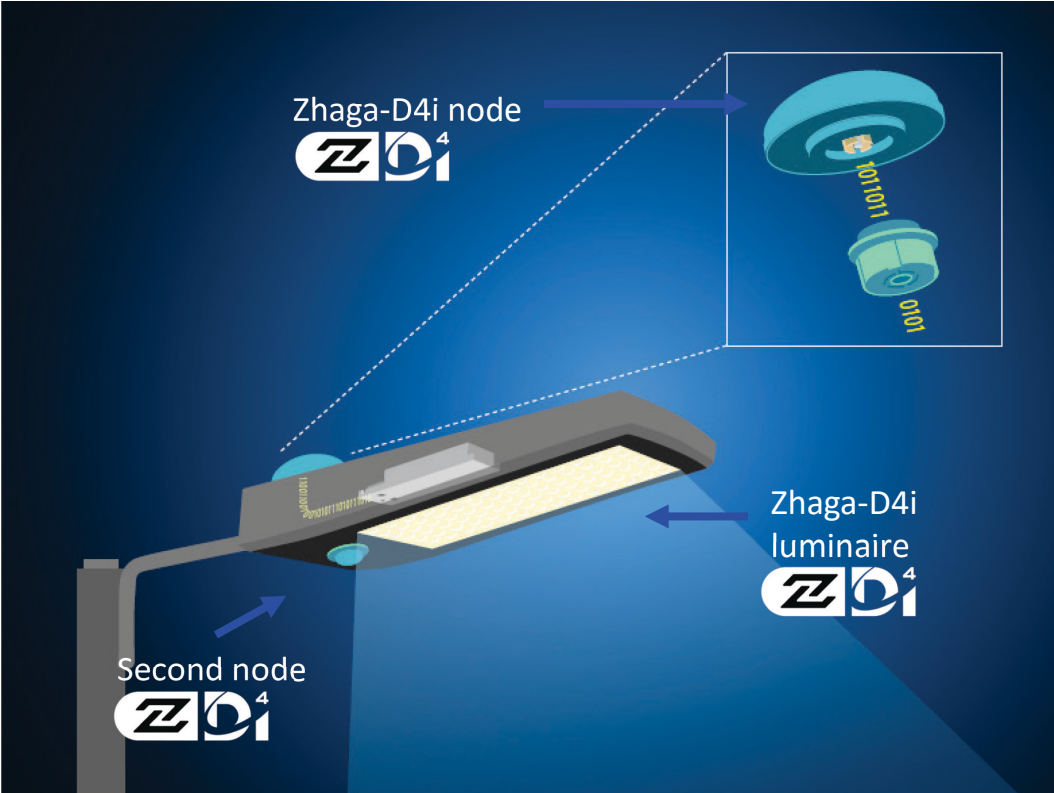
Zhaga-D4i interface for outdoor luminaires



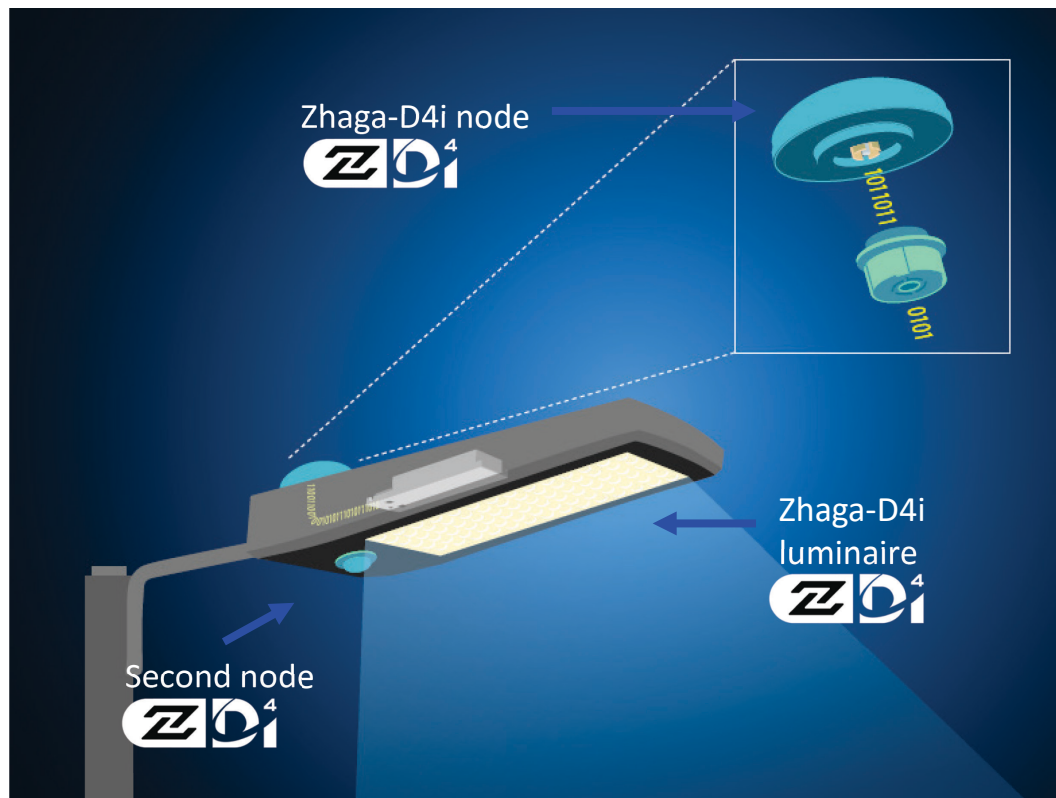
Zhaga-D4i interface for outdoor luminaires



Zhaga-D4i interface for outdoor luminaires



Zhaga-D4i interface for outdoor luminaires



Zhaga-D4i certification adds value

- Confidence in multi-vendor interoperability
- Communication
- Future-proof luminaires

Zhaga-D4i interface for outdoor luminaires

D4i certification



Zhaga-baseplate



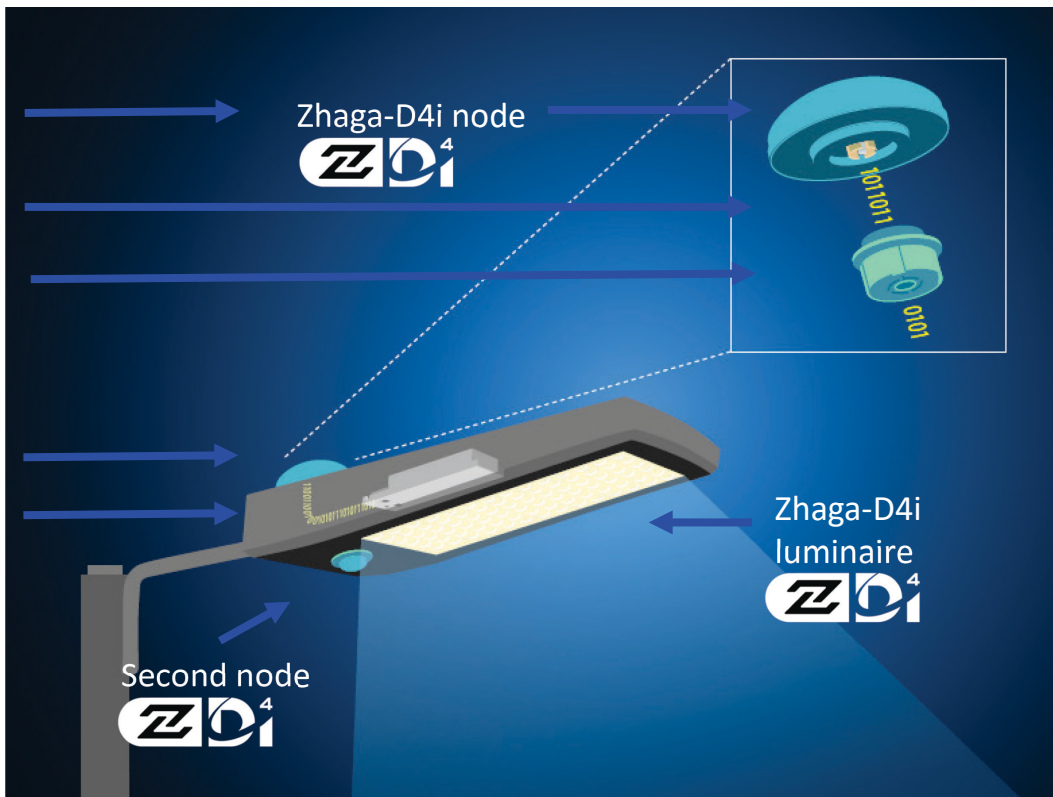
Zhaga-receptacle



Zhaga-cap



D4i driver

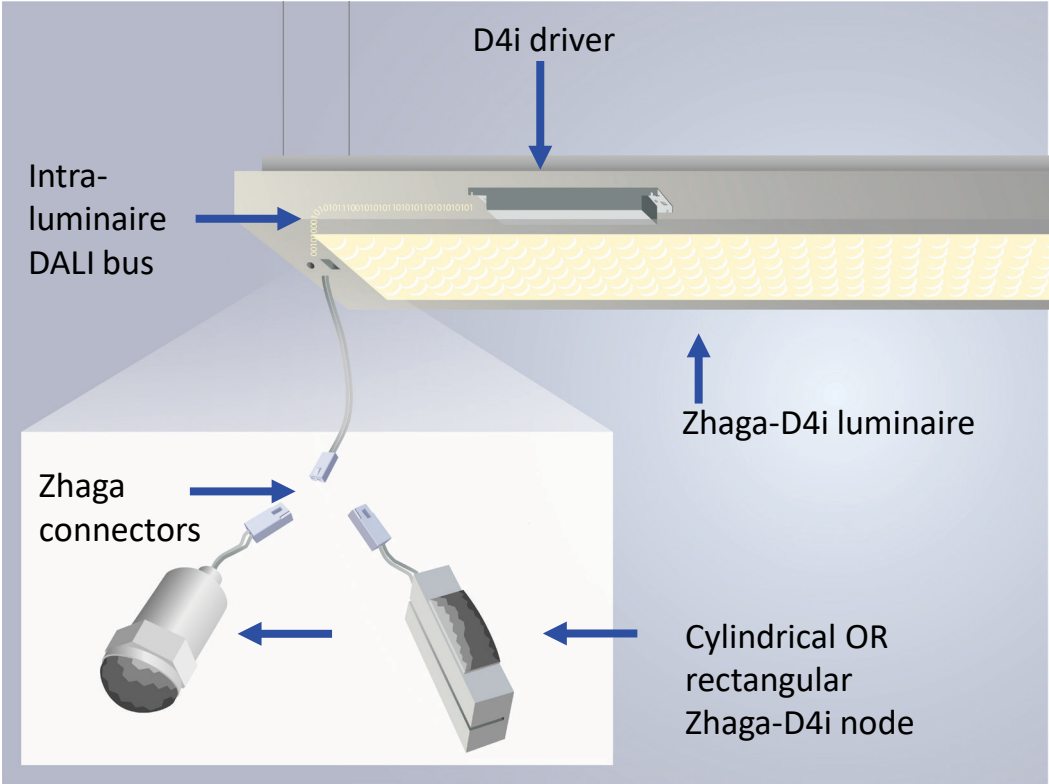


Zhaga-D4i certification is easy

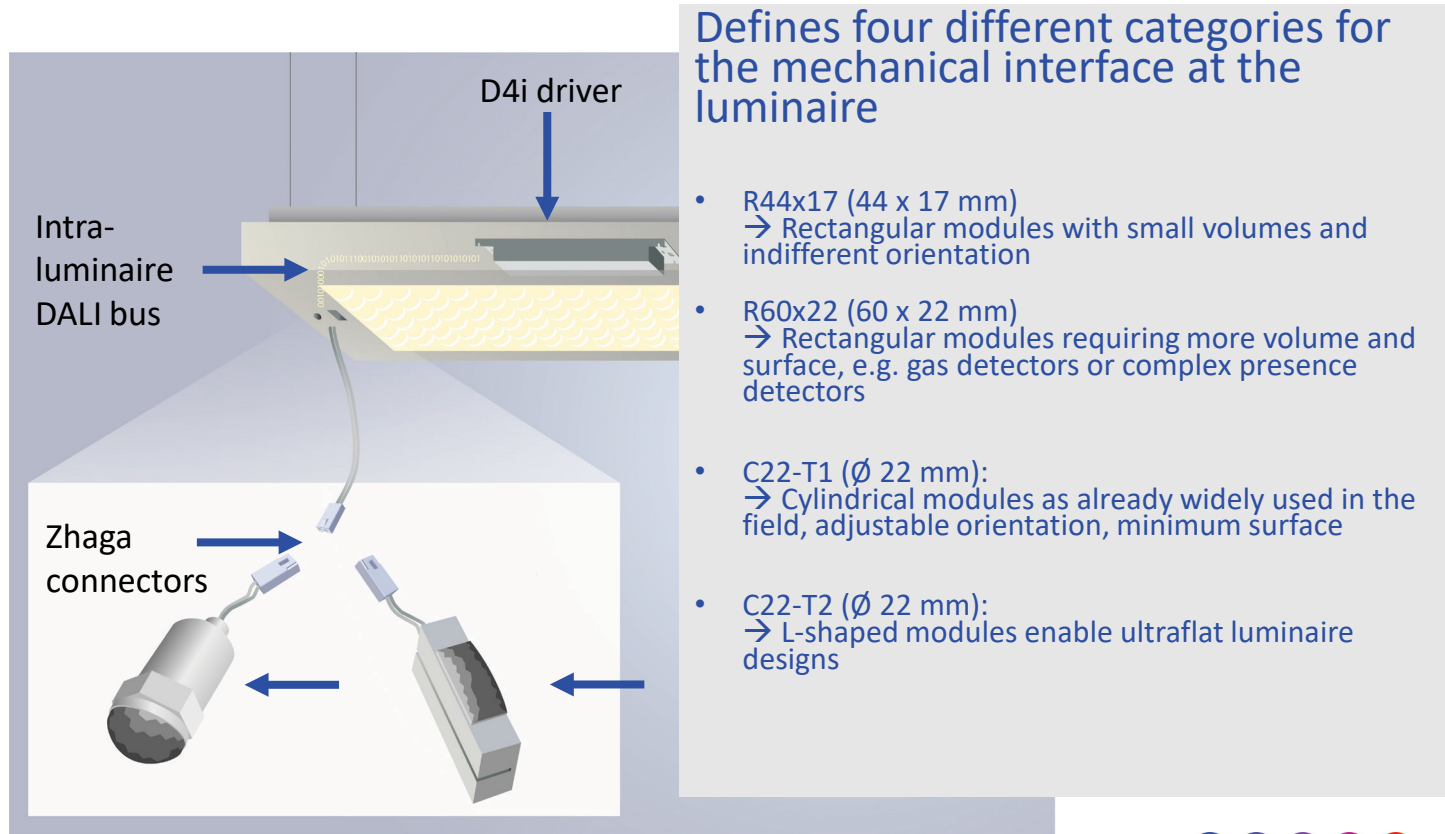
- Certified components
- Simple flow
- Knowledgeable test houses



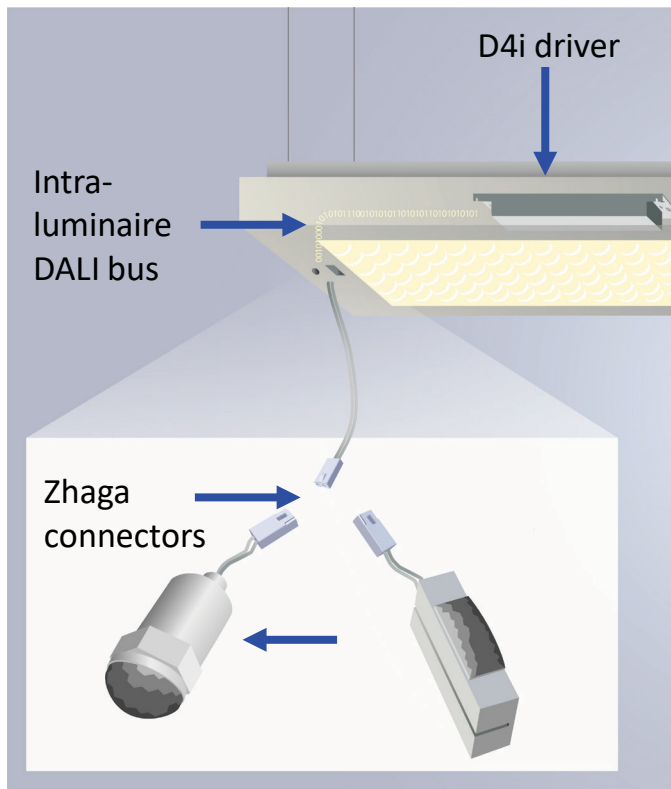
Zhaga-D4i interface for indoor luminaires



Zhaga-D4i interface for indoor luminaires



Zhaga-D4i interface for indoor luminaires

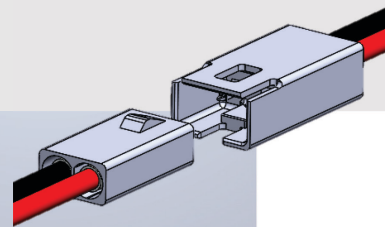


Defines a connector

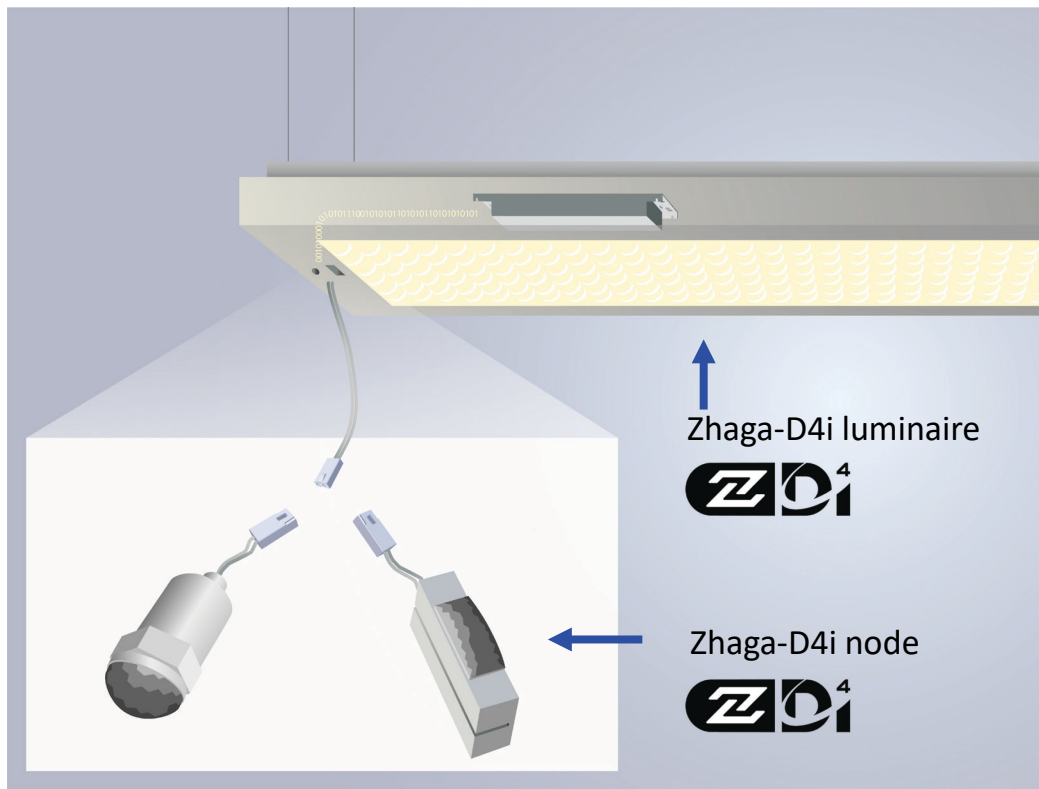
- Two position pin and socket interface
- Poka Yoke features prevent incorrect mating
- Connector provides finger proof protection

”if it fits it works”

- Easy and safe replacement
- plug-and-play connection
- future-proof the luminaire



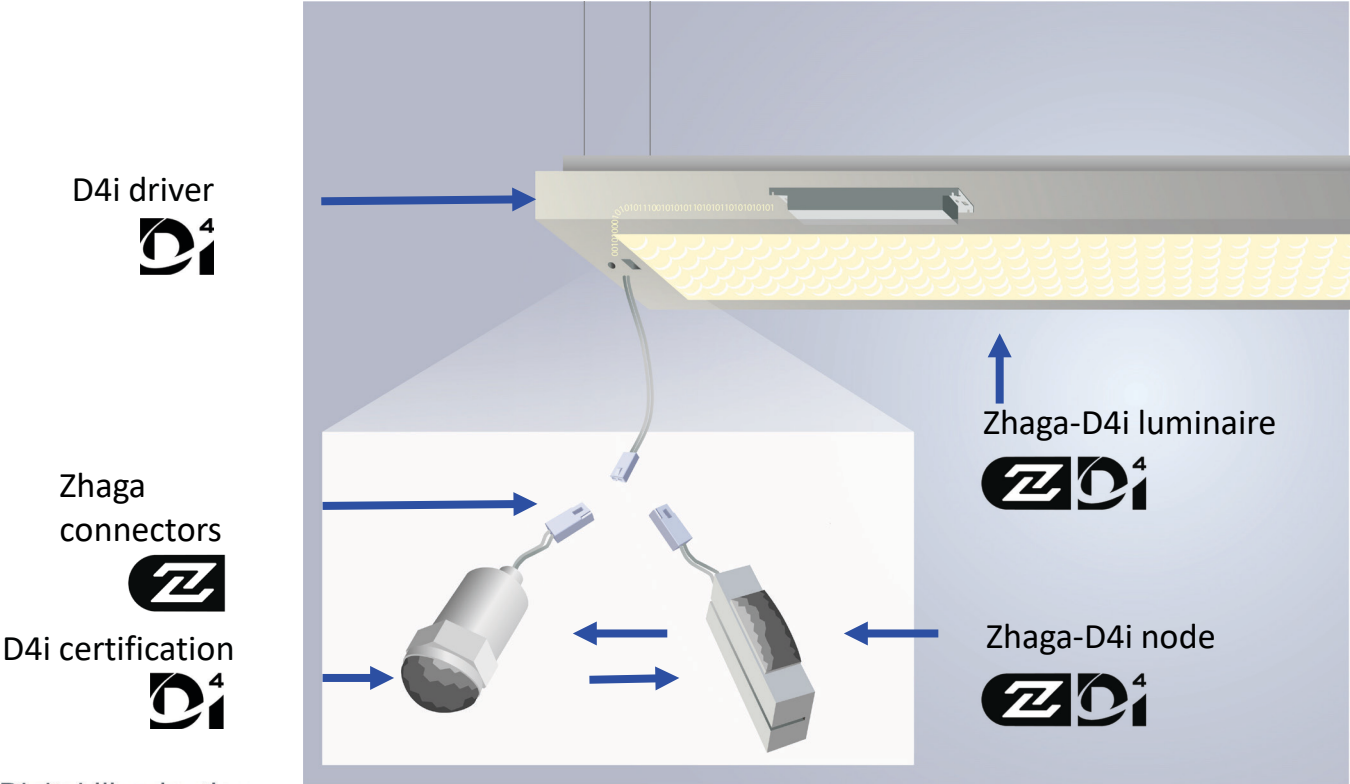
Zhaga-D4i interface for indoor luminaires



Zhaga-D4i certification adds value

- Confidence in multi-vendor interoperability
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Zhaga-D4i interface for indoor luminaires



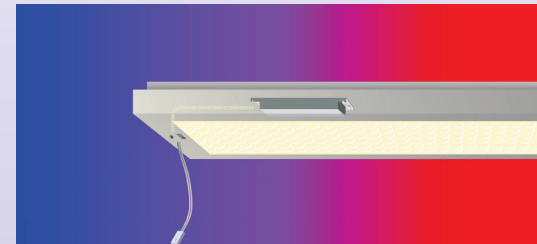
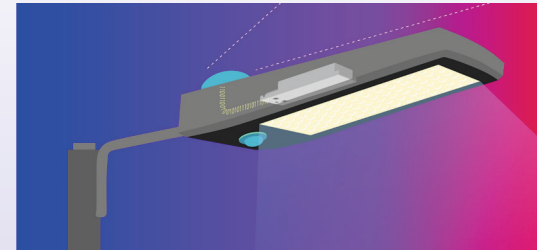
Zhaga-D4i certification is easy

- Certified components
- Simple flow
- Knowledgeable test houses



Zhaga-D4i certification for luminaires, Book 18

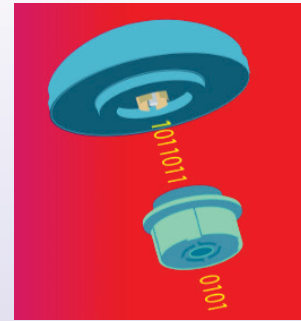
- Open to Zhaga Associate and Regular Members
 - That have signed logo license agreements
- Products use certified components (drivers, connectors, receptacles, baseplates, caps)
- Manufacturer connects to test house for a quote, options for family testing, and detailed instructions
- Manufacturer provides
 - Detailed circuit diagram of the luminaire
 - Construction diagram of the luminaire
 - Letter of confirmation (template on website, D4i certified driver)
- Test house uploads positive test summary to Zhaga database



Zhaga-D4i certification for nodes, Book 18



- Open to Zhaga Associate and Regular Members
 - That have signed logo license agreements
- Products need be D4i certified as control device and be classified as Type A or B
 - Requiring DiiA Regular or Associate membership
- Manufacturer connects to test house
- Manufacturer provides
 - Connector pin-out diagram of the node
 - Construction diagram of the node
 - Letter of confirmation (template on website)
 - And a sample for non-certified baseplates
- Test house uploads positive test summary to Zhaga database



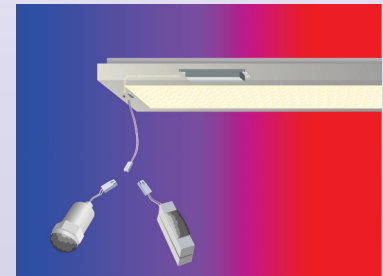
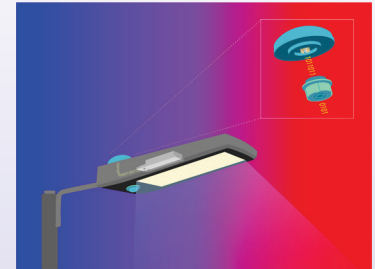
Benefits of the Zhaga-D4i standard and certification



- creates a simple plug-and-play way of adding nodes to a luminaire.
- is available as an open standard to drive scale and innovation.
- provides for interoperability across vendors.
- simplifies specification and tender process.
- allows selection of luminaires today that are future proof to the technology advances of tomorrow.

Zhaga-D4i certification is easy to do.

Zhaga-D4i certification provides the assurance to the market that luminaires and nodes from different vendors will work together.



Zhaga-D4i Book 18 eco-system

Outdoor luminaires:

- Zhaga-D4i certified luminaires available from 15 vendors
- ~80 Zhaga-D4i certified luminaire families
- Supported by
 - Zhaga receptacles, baseplates and caps: available from 6 vendors
 - D4i LED drivers: ~125 available from 8 vendors

Required in many tenders



THANK YOU!

Dee Denteneer

Secretary General of Zhaga

Follow us:



Zhaga-D4i certification for luminaires

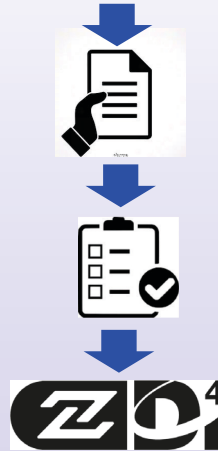


Organisation



Associate or regular membership of Zhaga is required

Process

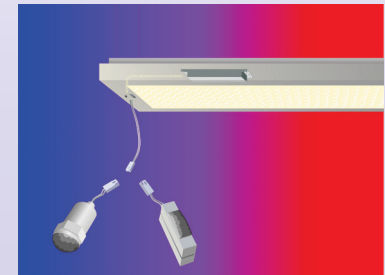
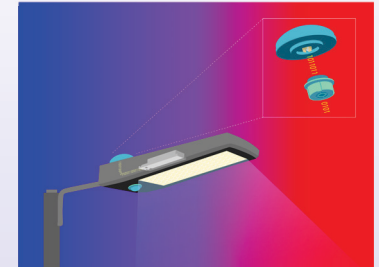


Comment

Compile required documentation and submit to Zhaga Test Centre

Tested for compliance against Zhaga specifications

Product awarded Zhaga-D4i certification and use of Zhaga and D4i logos



Zhaga-D4i certification for nodes for Book 18



Organisation

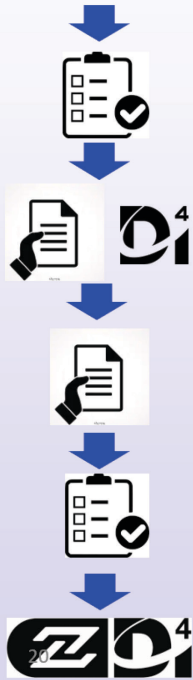
Process

Comment

Associate or regular membership of DiiA is required



Associate or regular membership of Zhaga is required



Product self tested or tested by DiiA test house

Submit results to the DiiA for verification and D4i certification.

Submit product documentation to Zhaga Test Centre

Tested for compliance against Zhaga specifications

Product awarded Zhaga-D4i certification and use of Zhaga and D4i logos

