



CONTROL  
LUX<sup>air</sup> lite

Connected Solutions  
Outdoor



Controlux Air Lite is a solution that allows you to transform your lighting infrastructure into a fully manageable platform based wireless controls solution. With Controlux Air Lite, users gain complete control over their site via the Controlux Air Platform. The cellular controller includes a built in SIM card which eliminates the need of having a gateway device, making it a cost-effective solution for small lighting installations.

### Cellular Controller

Cellular communication, lighting control and external sensor interface.

The Zhaga D4i cellular node includes a integral SIM card which allows for the luminaire to directly communicate with the Contralux Air platform without the need for a 'Wireless Gateway'.

It creates a wireless mesh network, between luminaires, allowing interconnected controls.

The cellular controller is available with code CTA.LITE (requires luminaires with .TZ01 or TZ03).



### Motion Sensor

Zhaga D4i based motion sensor which comprises of low power PIR motion sensor which will operate together with cellular controllers to form part of the controls network.

Range:  
12m height. 15m radius.  
4m height. 12m radius.

Available with code 'TZ03'.



### Cellular Communication

Leveraging cellular technology, Controlux Air Lite controllers gain direct access to the user interface negating the need for a gateway device.

This also creates a mesh network, allowing for seamless communication and enhanced fault tolerance across the lighting network.

# The Customer interface

## Intuitive user interface

Gain in-depth insights into every single aspect of your lighting system. Smart analytics and simple charts will help you make the right decision about your lighting infrastructure.



## Automatic failure reports

Lighting-related system faults are identified, and automatic failure reports are sent in real-time. This results in optimized maintenance, better planning, reduced costs and extended luminaire life.



## Power metering

Dedicated hardware provides precise energy metering, which is converted into detailed energy usage and savings reports.



## Accurate real-time data

Generation of analytics per an individual light point or their groups. Available data includes: notifications about lighting-related faults, number of triggers per light point, generated energy savings, heatmaps, and more.



## Map-based visualizations

Outdoor lighting points are represented in a graphic interface on Google Maps, coordinated with GPS technology, which enables you to locate, monitor and control individual light points with ease.



## Continuous support

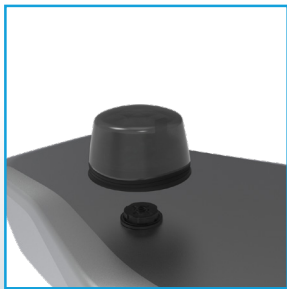
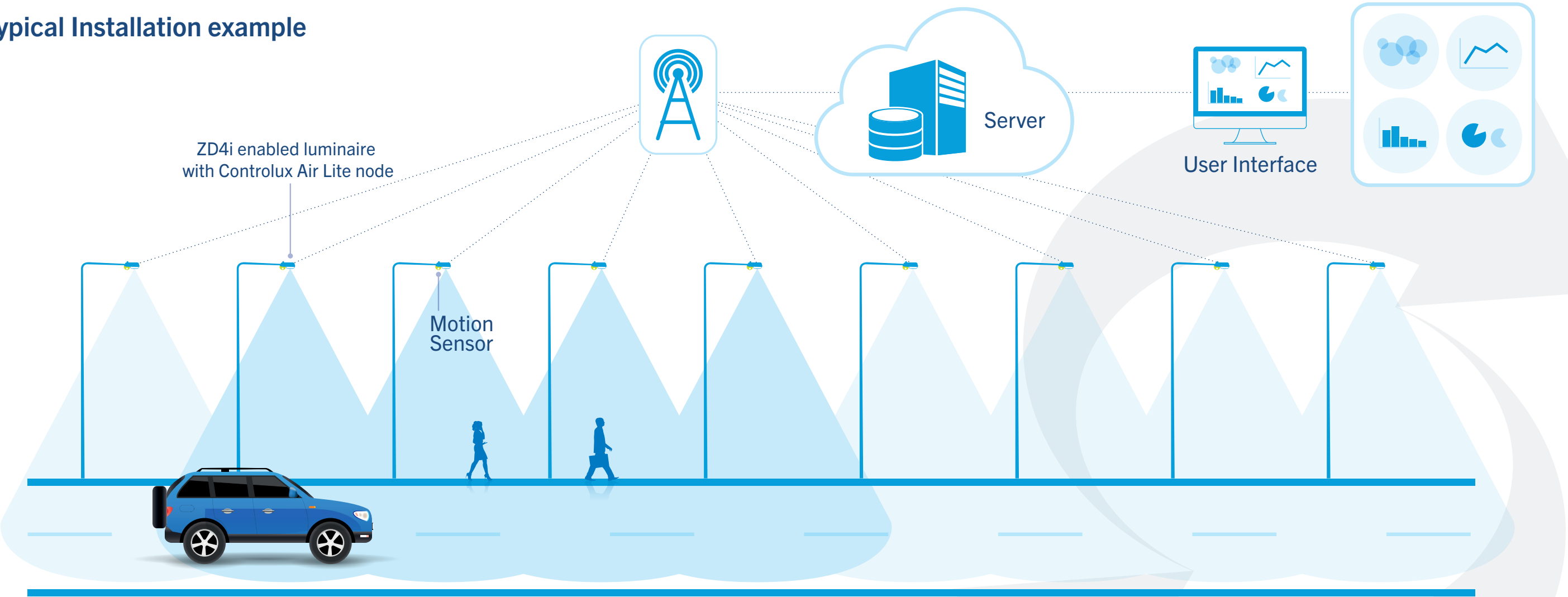
The Customer Interface receives periodic security and feature upgrades. We do this to ensure optimum functionality and system performance.



# Intelligent Lighting Architecture

Cellular lighting control network

## Typical Installation example



**Cellular Node**  
Zhaga D4i cellular communication lighting control node.





**Motion Sensor**  
Detects pedestrians, cyclists and cars range. Range: 12m height. 15m radius. 4m height. 12m radius.

For a full demonstration of the system capabilities please contact Holophane Europe Ltd.  
\* Network access is required to enable access to City Manager (subscription based service).



Controlux Air and Controlux Air Lite comparison table

		
ZD4i	Yes	Yes
Network Type	Mesh	Mesh
Software Engine	Proprietary	Proprietary
Communication to UI	Cellular, Wi Fi or Ethernet	Cellular
Requires Gateway	Yes	**No
Groupable	*Yes, via the UI	*Yes, via the UI
Compatible with luminaire integrated PIRs (ZD4i)	Yes	Yes
Compatible with remote PIR	Yes	No
Compatible with override switch	Yes	No
Remote 'off site' user access	Yes	Yes
Site reporting	Yes	Yes
Map based visualisation	Yes	Yes
Controls Profiles	Yes	Yes
Max. devices	200 per gateway	No limit
Subscription required	Yes	Yes
Auto commissioning	No	Yes

\* Nodes cannot be mixed on the same mesh network.  
\*\* Controlux Air Lite controllers are not compatible with the Controlux Air gateway.  
Controlux Air Lite controllers can be used as an extension to Controlux Air-enabled projects where both the maximum number of controllers has been reached, and where the newly installed luminaires are out of range of the gateway. Subject to the customer lighting control requirements.

Secure Data Connection

We take customer data protection seriously. That is why the Controlux Air platform is highly secure. Furthermore, our in-built multilevel back-up system ensures that the lights will never completely turn off, even in an unlikely case of system failure.



For all information about Controlux Air please scan our QR code or visit:  
<https://www.holophane.co.uk/controlux-air>

Annual Controls Service Plans

Please see the service plans for available for the Controlux Air system. For a full demonstration of the system capabilities please contact Holophane Europe Ltd.

Feature	Basic	Advance
Online System Access 24/7	✓	✓
Remote Support	✓ (2/Year)	✓ (4/Year)
Enquiry acknowledgement Time (hrs)	First available	48
Remote Diagnostics	✓	✓
Annual System Performance Checks		✓
Annual Energy Report		✓

Secure Data Connection

Unit-to-unit communication

Controlux Air Lite controllers (OLCs) communicate with each other through a very stable cellular wireless network that is self-configuring and self-healing. In an unlikely case of an OLC failure, the specific lamp automatically switches back to 100% brightness. Other OLCs in the network are not affected.

Cellular Node Communication

The Controlux Air Lite controller is connected to the server using the global telecom standard LTE Cat-1/ GSM). Using IoT communication significantly improves the security and reliability by connecting to the local phone network, eliminating the need for a local gateway.

Server Customer Interface connection

The Customer Interface uses REST API. The OAuth 2.0 protocol is used for the communication between Customer Interface and API. The HTTPS ensures the further security of the connection. In an unlikely case of server failure or loss of connection, the Gateway and the OLCs keep operating in the defined dimming profile with no change. Remote management of light would not be possible during this period.



Controlux Air servers are hosted at TCN Data Hotels in the Netherlands. Achieving 99,9999% availability as of 2001, TCN is a renowned player in the data center market. TCN designs, builds and operates trusted 100% neutral data centers, providing the fundament of mission-critical environments. Critical components, including connections to the power grid, are at least N+1 redundant. Furthermore, the data

hotel is self-sufficient: in case main power supply fails, the entire energy supply can be provided by UPS and emergency power systems. Security is given top priority, so outsiders are kept out and authorized users have controlled access inside. Physical security is on duty 24/7/365 days of the year and is supported by smart CCTV systems, electronic access systems, and a smart facilities management system.



## Connected Solutions Outdoor

Holophane Europe Limited  
Bond Avenue, Bletchley, Milton Keynes MK1 1JG United Kingdom  
Telephone: +44 ( 0 ) 1908 649292 UK Fax: +44 ( 0 ) 1908 367618  
International Fax: +44 ( 0 ) 1908 363789  
E-mail: [info@holophane.co.uk](mailto:info@holophane.co.uk)  
[www.holophane.co.uk](http://www.holophane.co.uk)



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