

CONTROLUXAIR LITE

DESCRIPTION

Plug-and-Play upgrade for Zhaga D4i luminaires (Zhaga Book 18 compliant). Luminaires with ContrluxAir Lite can be remotely monitored, managed and controlled using ControluxAir CityManager.

Built on the global telecom standard (LTE Cat-1/ GSM) that securely connects billions of devices together, ControluxAir Lite controller (OLC) offers long range, deep coverage, high availability, high security and managed wide area network (WAN).

IoT communication enables the luminaires to connect directly to the local cell phone network, thereby significantly improving the security and reliability, as well as eliminating the need for a local gateway.

An inbuilt 868MHZ RF modem secures a fast and reliable so called “neighbour-trigger”, this to pass a trigger from an ControluxAir Lite node (with added ZD4i motion sensor) to neighbouring ControluxAir Lite nodes (not compatible with ControluxAir nodes) OLC's, to provide for a safe circle of light around passing traffic.

When combined with a D4i LED driver, the ControluxAir Lite delivers advanced system health analytics, power metering and asset management support data.

Inbuilt GPS is ideal for large-scale citywide deployment wherein high installation speed is preferred.

FEATURES

- LTE CAT-1/ GSM communication (WAN)
- 868MHz RF communication (LAN)
- Smart Driver ready (SR / D4i)
- Control up to 8 DALI Drivers individually
- Support for:
 - DALI Part 207 (DT6, LED Driver)
 - DALI Part 208 (DT7, Relay)
 - DALI Part 209 (DT8, Colour control type Tc & type RGBWAF)
- IP 66, UV stabilized and IK09
- Ambient light sensor/ Temperature sensor (Tc)
- Universal luminaire compatibility via standard Zhaga Book 18 interface
- Remote switch on/ off/ dimming
- Lighting control via DALI 2.0/ D4i
- Adaptive, autonomous, astro-clock and calendar-based dimming
- Inbuilt GNSS
- Inbuilt tilt sensor



BENEFITS

- Quick and easy installation
- Remote management via CityManager LMS
- Automatic failure detection
- Optimized for motion detection with additional Zhaga D4i motion sensor
- Send/ receive motion triggers to/ from neighbouring devices via LAN

CONTROLUXAIR LITE

ELECTRICAL DATA

Supply voltage	24 V DC
Input voltage range	18-30V DC
Rated supply current	125 mA
Power consumption operating	< 2W

PROTECTION

Electical protection	Class II
Supply Protection	Reverse Polarity Protection
Output Protection	Short circuit protection with auto-recovery Reverse polarity protection and over-voltage protection on Dimming lines

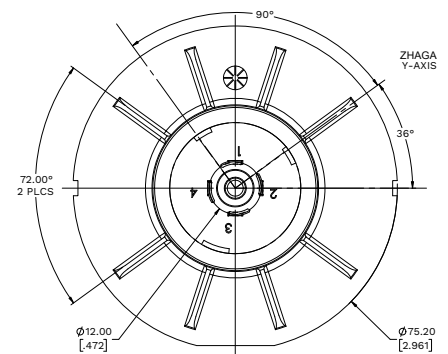
COMMUNICATION DATA

WAN	
Wireless communication	LTE CAT-1/ GSM
Frequency bands	850/900/1800/1900/2100/2400/2700 MHz
IoT connectivity	SIM included Format: Micro-SIM or MFF2 eSIM (on request)
Product compatibility	Direct wireless communication with CityManager LMS via local cell phone/ telecom network (no additional gateway needed)
Network security	128 AES multi-layer security configuration, TLS/ SSL based PKI method with asymmetric encryption for secure authentication and data encryption
Over-the-air updates	Yes
LAN	
Wireless communication	RF
Frequency band	868 MHz ISM band
Product compatibility	Direct communication (send/ receive motion triggers) with neighbouring devices, set up via CityManager LMS



MECHANICAL DATA

Dimensions	Ø80mm x 40mm*
Weight	0.1 kg
Enclosure colour	Dark Grey (translucent)
Enclosure material	Polycarbonate, UL 94V0 compliant
Product mounting	Standard 4-pin ZHAGA (Book 18)



COMPLIANCE

Compliance		
Ambient temperature	-40°C to +70°C	
Relative humidity	<95%	
IP rating	IP66	
Impact rating	IK09	
Certification	CB	IEC 61347-1:2015+A1:2017 IEC 61347-2-11:2001+A1:2017
	CE EMC + UKCA EMC	EN IEC 55015:2019+A11:2020 EN 61547:2023
	CE RED + UKCA RF	EN IEC 55015-2019+A11-2020 EN 61547-2023 EN IEC 61000-3-2:2019 +A1:2021 EN 61000-3-3:2013 +A2:2021 EN 301 489-1 V2.2.3 EN 301 511 v12.5.1 EN 301 908-1 v15.2.1 EN 301 908-13v13.2.1 EN 301 489-52v1.2.1 EN 62311 2020 EN 300 220-1 V3.1.1 (2017-02) EN 300 220-2 V3.2.1 (2018-06) EN 301 489-1 V2.2.3 (2019-11) EN 301 489-3 V2.1.1 (2019-03)
	IP66	IEC 60529:1989+A1:1999+A2:2013
	IK09	IEC 62262:2002+A1:2021

OTHER FUNCTIONS

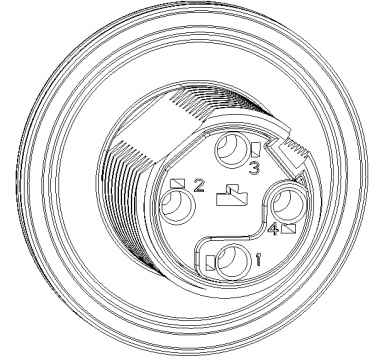
Location	GNSS (GPS/ GLONASS/ BDS/ Galileo/ QZSS)
Real-time clock (RTC)	Yes, (24 hours power backup)
AstroClock	Yes, turns the lamps on/off at sunset/sunrise and automated summer-winter time adjustment
Last Gasp	Yes
In-built sensors	Photocell (ambient light) Tilt Temperature (Tc)

ADDITIONAL INFORMATION

Default photocell setting	Turn ON light lux level can be set through CityManager. Default photocell setting is 30 lux.
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WIRING INFORMATION

Pin Number	Function
1	+24V power supply
2	Negative pole for DALI protocol and shared ground return for 24V supply
3	Positive pole for DALI protocol
4	Not in use



LOGISTICS INFORMATION

Order Code	Product
CTA.LITE	ControluxAir Lite incl. 10 Yrs. connectivity