

Smart Light Controller SmartNodes®

Datasheet

DS_2110_EN_B

SLC - Zhaga SLC-G4-R4



Solution description

SmartNodes is a Smart StreetLighting solution, future-proof and large-scale deployable.

SmartNodes transforms the street lighting infrastructure into a scalable communication network for other city sensors thanks to its solution of nodes and gateways, while providing a remote web service to control, manage and monitor light points.

The solution is composed of connected nodes (SLC or SLN), a gateway (APS) and a Central Management System (CMS) using the TALQ v2 protocol.

Product description

The SmartNodes SLC - Zhaga ("Smart Light Controller, Zhaga version") is a standardized connected node compatible with all Zhaga luminaires.

The SLC - Zhaga controls, monitors and provides luminaire information.

It is D4i compatible.

main features



**Direct Light
Point Control**



**Feedback On
Status & Health**



**Automatically
geolocated (GPS)**



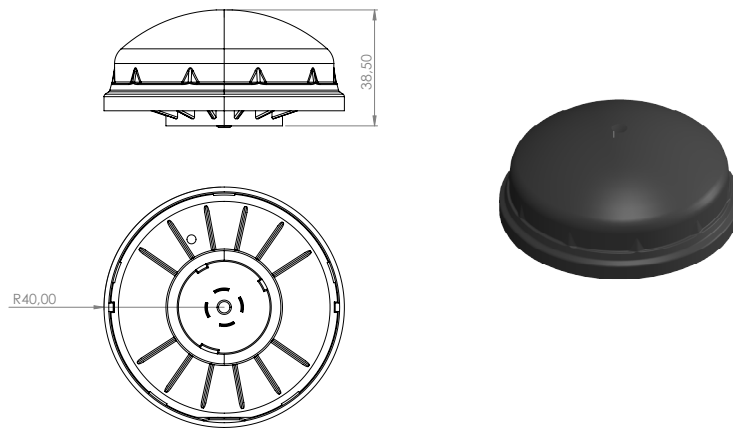
**Scalable Mesh
Network**



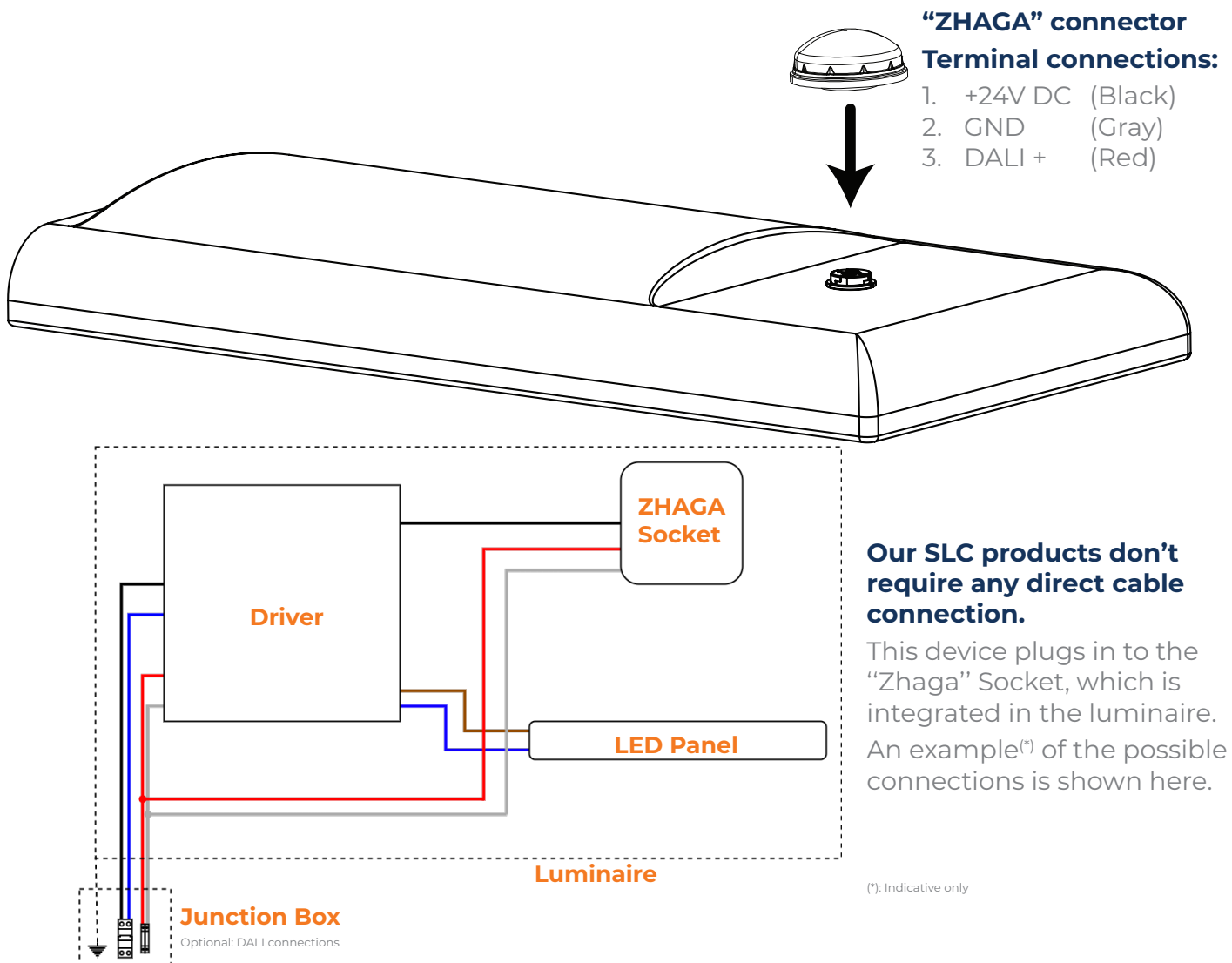
Plug & Play

Product drawings

Mechanical drawings



Electrical drawings



Technical Information

Mechanical

Housing Material - Base	Polybutylene Terephthalate	
Colour - Base	Gray	
Housing Material - Dome	Polycarbonate	
Colour - Dome	Transparant Gray	
Protection Class	IP66 (IEC 60529) IK09 (IEC 62262) IK07 (IEC63362) UL94-V0	Top impact Side impact
Connection Type	Zhaga Book 18 connector	
Weight	75g	

Environmental

Ambient Temperature	-30°C to +70°C
Ambient Humidity	0% to 100% RH
Storage Temperature	-40°C to +80°C

Compliance - Safety - Reliability

CE Certification	Yes	
Safety Standard ^(*)	IEC 62368-1:2014 + A1:2015 + A2: 2015	
EMC Standard	Emission : <ul style="list-style-type: none">• EN 55015• EN 55032• EN 61000-3-2	Immunity : <ul style="list-style-type: none">• EN 55024• EN 55035• EN 301489-1 V1.9.2
Radio Spectrum Efficiency	<ul style="list-style-type: none">• EN 300 328 V2.1.1• EN 300 330 V2.1.1	
DALI Standard	IEC 62386	
Mains Input Protection	Surge protection : <ul style="list-style-type: none">• EN61000-4-5 criteria B	

Approvals

EMC Directive 2014/30/EU

RED Directive 2014/53/EU

LVD Directive 2014/35/EU

RoHS Directive 2011/65/EU

CE Certification

^(*) : Pending certification for new product release

Mains Input

Nominal voltage	12V - 24V DC
Nominal current	25 - 80mA

DALI

Bus voltage	22,5VDC
Rated current	1,5mA
DALI Supply Current	5mA
Capacity	Up to 4 DALI drivers with DALI bus power supplied by the SLC - Zhaga More are possible if the DALI bus is powered by the drivers alongside the SLC - Zhaga Currently commands in broadcast only
Norm	DALI 2 Compliant - IEC 62386

Features

Processor	<ul style="list-style-type: none">• ARM Cortex M4F 32bits• RAM - 256kB• Flash - 1024kB
RGB LED	<ul style="list-style-type: none">• Status indication
GPS	<ul style="list-style-type: none">• Positioning & Time Retrieval• Built-in astronomical calendar
Temperature Sensor	<ul style="list-style-type: none">• Internal temperature measurement• Range from -30°C to +70°C• Accuracy: ±2 °C from -25 °C to +70 °C
Local Communication	<ul style="list-style-type: none">• Radio mesh-network powered by Wirepas.• Frequency : 2,4GHz• Rated output Power : +7,5dBm• RX sensitivity : -94dBm• Range : Up to 175m in open air.• Modulation : GFSK• Data rate : 1Mb/s• Over The Air Programmable (OTAP)• Self-Forming & Self-Healing• Network security : AES 128 bits encryption

Product versions

SLC-G4-R4-SP0C	Standard SLC - Zhaga
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CONNECTED
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FOR **SMARTER**
MOBILITY



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