



## DATASHEET

# Actis Zhaga

## DESCRIPTION

**Actis Force Nema7 Edition** is a smart and autonomous device for the remote control of LED light points equipped with DALI protocol drivers. Specially designed for every type of street light, including applications such as residential, urban and road. It is enabled with LoRaWAN communications and it is compatible with Zhaga standard socket luminaires.



## KEY FEATURES

- Relay output and Real time clock for controlling luminaire's ON/OFF and activating the preset regulation profiles.
- ON/OFF control: remote, astronomical clock or photocell.
- Equipped with dimming control: DALI-2.
- Built-in temperature sensor.
- Integrated accelerometer for the detection of hits and faulty installations.
- Plug-and play installation for luminaires compatible with Zhaga standard socket.
- Energy meter included to measure main electrical parameters (according to data provided by LED driver): voltage, current, energy, power factor, active and reactive power.
- Configurable general purpose input / output for external signalling.
- Autonomously performs actions based on external events.
- Lamp accurate location through board integrated GPS (optional).
- Wireless communication via LoRa according to standard LoRaWAN for several frequency bands: EU868, US915, AU915, AS923, IN865. Multicast support.
- Remote updating.

## TECHNICAL FEATURES

### Communications

Version	LoRa EU	LoRa US	LoRa AUS/ASIA	LoRa India
Frequency band	868 MHz	915 MHz	923 MHz	865 MHz
Power (Tx)	+14 dBm	+19 dBm	+19 dBm	+14 dBm
Receiver sensitivity (Rx)	-137 dBm	-130dBm	-130 dBm	-137 dBm
Compliance	LoRaWAN 1.0.2			
Antenna	Internal			

### Dimming interfaces

DALI-2	according to IEC 62386 part 101,102,103,104,201,207,216,217,218,219,220,221,222,223,224,301,302,303,304,305
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### Electrical connection and Power supply

Voltage range	22 - 26VDC
Power consumption	< 0.5W

## ORDERING CODES

**AZ-SI-LW-EU** Actis Plus Zhaga device, ZHAGA socket, configurable digital input/output, Interface DALI-2, GPS, ACC, MEMORY, LoRaWAN EU868

**AZ-SI-LW-US** Actis Plus Zhaga device, ZHAGA socket, configurable digital input/output, Interface DALI-2, GPS, ACC, MEMORY, LoRaWAN US915

**AZ-SI-LW-AU** Actis Plus Zhaga device, ZHAGA socket, configurable digital input/output, Interface DALI-2, GPS, ACC, MEMORY, LoRaWAN AU915

**AZ-SI-LW-AS** Actis Plus Zhaga device, ZHAGA socket, configurable digital input/output, Interface DALI-2, GPS, ACC, MEMORY, LoRaWAN AS923

**AZ-SI-LW-IN** Actis Plus Zhaga device, ZHAGA socket, configurable digital input/output, Interface DALI-2, GPS, ACC, MEMORY, LoRaWAN IN865

**AZ-OI-LW-EU** Actis Plus Zhaga device, ZHAGA socket, configurable digital input/output, LoRaWAN EU868

**AZ-OI-LW-US** Actis Plus Zhaga device, ZHAGA socket, configurable digital input/output, Interface DALI-2, LoRaWAN US915

**AZ-OI-LW-AU** Actis Plus Zhaga device, ZHAGA socket, configurable digital input/output, Interface DALI-2, LoRaWAN AU915

**AZ-OI-LW-AS** Actis Plus Zhaga device, ZHAGA socket, configurable digital input/output, Interface DALI-2, LoRaWAN AS923

**AZ-OI-LW-IN** Actis Plus Zhaga device, ZHAGA socket, configurable digital input/output, Interface DALI-2, LoRaWAN IN865

**AZ-00-LW-EU** Actis Plus Zhaga device, ZHAGA socket, Interface DALI-2, LoRaWAN EU868

**AZ-00-LW-US** Actis Plus Zhaga device, ZHAGA socket, Interface DALI-2, LoRaWAN US915

**AZ-00-LW-AU** Actis Plus Zhaga device, ZHAGA socket, Interface DALI-2, LoRaWAN AU915

**AZ-00-LW-AS** Actis Plus Zhaga device, ZHAGA socket, Interface DALI-2, LoRaWAN AS923

**AZ-00-LW-IN** Actis Plus Zhaga device, ZHAGA socket, Interface DALI-2, LoRaWAN IN865

## TECHNICAL FEATURES

### Functional features

<b>Switching function</b>	Astronomic clock, Always ON (Luminaire is ON WHEN power supply is ON), Photocell
<b>Dimming regulation</b>	Remote or Preset (16 available profiles: 7 different profiles reserved for each weekday and 9 profiles for 9 specific days)
<b>Alarms</b>	Temperature, and voltage, current, power and power factor deviations (according to driver support)
<b>Accelerometer</b>	Integrated
<b>GPS</b>	Compatible with GPS, GLONASS, BeiDou/Compass (depending on the version)
<b>Storage</b>	> 7 days (depending on the version)
<b>Input &amp; output</b>	Configurable by extra terminal of Zhaga connector external power supply range

### Environmental and Operating conditions

<b>Operating temperature range</b>	-20° a 65°C
<b>Protection class</b>	IP66, IK09
<b>Lifetime</b>	MTBF>150.000h según Telcordia SR-332

### Mechanical features

<b>Socket</b>	ZHAGA 108-32125 ANSI C136.41-2013
<b>Dimensions</b>	41mm high x 80mm diameter
<b>Weight</b>	100gr
<b>Material</b>	Base (94 V0)- cover (Polycarbonate)

