



## DATASHEET

# Actis Force

## DESCRIPTION

**Actis Force Nema7 Edition** is a smart and autonomous device for the remote control of high-power LED luminaires, equipped with 1-10V or 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 compatible with NEMA 7 standard socket luminaires.



## KEY FEATURES

- Relay output and Real time clock for controlling luminaire's ON/OFF and activating the preset regulation profiles.
- Several ON/OFF control: remote, astronomical clock or photocell.
- Equipped with two dimming control: DALI protocol and 1-10V signals.
- PCB-mounted temperature sensor.
- Plug-and play installation for luminaires compatible with NEMA 7 standard socket.
- Energy meter included to measure main electrical parameters: voltage, current, energy, power factor, active and reactive power.
- Configurable deviation alarms based on reference measurement thresholds.
- Lamp accurate location through board integrated GPS.
- Wireless communication via RF LoRa according to standard LoRaWAN 1.0.2 for several frequency bands: EU868, US915, AU915, AS923, IN865.

## 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	-130 dBm	-130 dBm	-137 dBm
Compliance	LoRaWAN 1.0.2			
Antenna	Internal			

### Dimming interfaces

DALI-2	12-20.5 VDC, 16 mA max; according to IEC 62386 part 101, 102, 104, 201, 203, 207.
1-10V	1-10 VDC, 16 mA max; according to IEC 60929 annex E

### Electrical connection and Power supply

Voltage range	90 – 480VAC 50/60Hz
Voltage max	525VAC
Lamp load	16A
Power consumption	< 1.5W

## ORDERING CODES

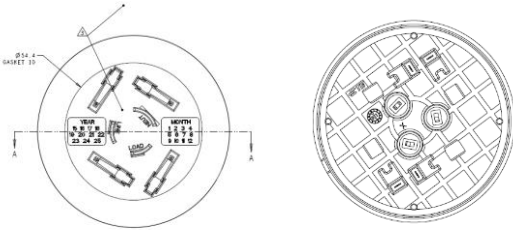
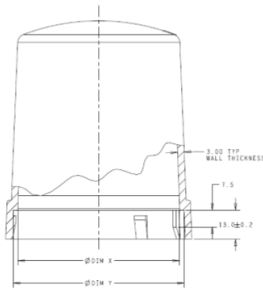
**AF-SI-LW-EU** Actis Force Nema 7 device, Nema7 socket, relay output, analog&digital input, network analyzer, Interface 1-10V&DALI-2, Sensor Powersupply, GPS, ACC, MEMORY, Lorawan EU868

**AF-SI-LW-US** Actis Force Nema 7 device, Nema7 socket, relay output, analog&digital input, network analyzer, Interface 1-10V&DALI-2, Sensor Powersupply, GPS, ACC, MEMORY, Lorawan US915

**AF-SI-LW-AU** Actis Force Nema 7 device, Nema7 socket, relay output, analog&digital input, network analyzer, Interface 1-10V&DALI-2, Sensor Powersupply, GPS, ACC, MEMORY, Lorawan AU915

**AF-SI-LW-AS** Actis Force Nema 7 device, Nema7 socket, relay output, analog&digital input, network analyzer, Interface 1-10V&DALI-2, Sensor Powersupply, GPS, ACC, MEMORY, Lorawan AS923

**AF-SI-LW-IN** Actis Force Nema 7 device, Nema7 socket, relay output, analog&digital input, network analyzer, Interface 1-10V&DALI-2, Sensor Powersupply, GPS, ACC, MEMORY, Lorawan IN863



## 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>	Voltage, current, power and power factor deviations
<b>Accelerometer</b>	Integrated
<b>GPS</b>	Compatible with GPS, GLONASS, BeiDou/Compass
<b>Storage</b>	More than 1k memory records in case of communications failure

### Network analyzer features

<b>Measurements</b>	Voltage, current, energy, power factor, active and reactive power
<b>Accuracy</b>	<0.2%

### Environmental and Operating conditions

<b>Operating temperature range</b>	-20° to 60°C
<b>Protection class</b>	IP-66 IK09
<b>Lifetime</b>	MTBF>150.000h according to Telcordia SR-332

### Mechanical features

<b>Socket</b>	NEMA 7- 108-32125 ANSI C136.41-2013
<b>Dimensions</b>	100mm height x 82mm diameter
<b>Weight</b>	200gr
<b>Material</b>	Base (94 V0)- cover (Polycarbonate)