

DATASHEET

Actis Plus

DESCRIPTION

Actis Plus is a smart and autonomous device for the remote control of light points equipped with 1-10V and DALI-2 protocol drivers. The device is specially designed for all types of streetlights, including applications such as residential, urban and road. It is enabled with LoRaWAN communications and installed inside the light point with minimal impact.



KEY FEATURES

- Relay output and Real time clock for controlling luminaire's ON/OFF and activating the preset dimming regulation profiles.
- ON/OFF control by Astronomical clock or remote.
- Available with most used dimming control: DALI-2 protocol and 1-10V signals. DALI-2 protocol, enables data acquisition and point to point control up to 8 luminaires or sensors.
- PCB-mounted temperature sensor.
- 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.
- Light point accurate location through board integrated GPS (under request).
- In case of power loss or offline operation, the parameters are stored and sent when online operation is restored.
- Remote firmware updated possible for some network technologies.
- Analog and digital inputs for data acquisition of external sensors, like present or activity sensors, traffic counting detector, environmental devices...
- AC digital input.
- 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	External			

Dimming interfaces

DALI-2	-20.5 VDC, 16 mA max; according to IEC 62386 part 101,102,103,104,201,207,216,224,301,302,303,304,305
1-10	1-10 VDC, 16 mA max; according to IEC 60929 annex E12
Input & Output	2 analog input (0-10V or 4-20mA) and 1 digital input

Electrical connection and Power supply

Voltage range	100 – 230VAC 50/60Hz
Voltage max	250 VAC
Lamp load	4A
Power consumption	< 1 W



ORDERING CODES

AP-OI-LW-AS Actis Plus device, relay output, 2 analogic & 1 digital input, network analyzer, Interface 1-10&DALI-2, LoRaWAN AS923
AP-OI-LW-AU Actis Plus device, relay output, 2 analogic & 1 digital input, network analyzer, Interface 1-10&DALI-2, LoRaWAN AU915
AP-OI-LW-EU Actis Plus device, relay output, 2 analogic & 1 digital input, network analyzer, Interface 1-10&DALI-2, LoRaWAN EU868
AP-OI-LW-IN Actis Plus device, relay output, 2 analogic & 1 digital input, network analyzer, Interface 1-10&DALI-2, LoRaWAN IN865
AP-OI-LW-US Actis Plus device, relay output, 2 analogic & 1 digital input, network analyzer, Interface 1-10&DALI-2, LoRaWAN US915
AP-GI-LW-AS Actis Plus device, relay output, 2 analogic & 1 digital input, network analyzer, Interface 1-10&DALI-2, GPS, LoRaWAN AS923
AP-GI-LW-AU Actis Plus device, relay output, 2 analogic & 1 digital input, network analyzer, Interface 1-10&DALI-2, GPS, LoRaWAN AU915
AP-GI-LW-EU Actis Plus device, relay output, 2 analogic & 1 digital input, network analyzer, Interface 1-10&DALI-2, GPS, LoRaWAN EU868
AP-GI-LW-IN Actis Plus device, relay output, 2 analogic & 1 digital input, network analyzer, Interface 1-10&DALI-2, GPS, LoRaWAN IN865
AP-GI-LW-US Actis Plus device, relay output, 2 analogic & 1 digital input, network analyzer, Interface 1-10&DALI-2, GPS, LoRaWAN US915

TECHNICAL FEATURES

Functional features

Switching function	Astronomic clock, Always ON (Luminaire is ON WHEN power supply is ON)
Dimming regulation	Remote or Preset (16 available profiles: 7 different profiles reserved for each weekday and 9 profiles for 9 specific days)
Alarms	Voltage, current, power and power factor deviations
GPS	Compatible with GPS, GLONASS, BeiDou/Compass
Storage	More than 1k memory records in case of communications failure

Energy meter features

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

Environmental and Operating conditions

Operating temperature range	-20° to 60°
Protection class	IP-30
Lifetime	MTBF>150.000h according to Telcordia SR-332

Mechanical features

Dimensions	106mm x 65mm x 24mm
Weight	125 gr
Material	ABS