STREGA
WIRELESS SMART-EMITTER

Extreme range **LoRaWAN®** emitter for Street lighting

- ⊙ LoRaWAN time-controlled emitter for street lighting
- ⊙ Extreme range signal propagation
- ⊙ Battery operated with ultra-low consumption - 7+ years autonomy
- ⊙ Time-controlled ON/OFF schedules
- ⊙ Fraud resistant with tamper
- ⊙ License free operation on EU868, US915 and AS923
- ⊙ IoT ready (compliant with all Internet of Things platforms)
- ⊙ Exceptional signal penetration through obstacles
- ⊙ Provided with free of charge Android and iOS App
- ⊙ Available in LoRaWAN Class A (LITE) and Class C (FULL)

The **STREGA time-controlled Emitter** is a long distance wireless switching device with embedded **LoRaWAN®** technology. With its ultra-low-power consumption, the Smart-Emitter can trigger ON or OFF operations from its embedded AC bistable relay that can feed street light poles or feeders. The emitter is working on external power (Class C) or on batteries during 7+ years (Class A) and through extreme long distances with exceptional obstacles penetration.

- ➔ **Extreme range:** ultra-long range propagation of the signal with deep obstacles penetration (15km+ / 10+mi. LOS)

- ➔ **Automatic "schedulers":** programmable ON/OFF sequences

- ➔ **Embedded 250VAC/5A bistable relay**

- ➔ **Industrial grade:** strong electromagnetic noise immunity and high temperature operation up to 70°C/160°F

- ➔ **Low consumption:** ultra-low power with 7+ years autonomy

- ➔ **Tampering:** any misuse or wire cut is immediately reported

- ➔ **Mobile Control:** operate your Street lighting directly from your smartphone or tablet

Operate your street lights securely from your smartphone or tablet

Specifications

Features	Specifications
Product ID	Time-controlled wireless emitter
Radio technology	LPWAN LoRaWAN 1.0.2 Class A (LITE) – star-of-stars topology – or Class C (FULL edition)
Working t°	-20°C...+70°C / -4°F...160°F
Embedded switching relay	Max. 250 VAC - 5A bistable - NO+NF (2 lines)
Antenna	embedded
Manual override	Press buttons for local ON/OFF or by approaching a magnet
Extra sensors	Temperature and hygrometry, 2 x Digital Inputs, 1 x 0-10VDC analog
Duty Cycle	100% continuous rating
Tamper	Enclosure opening is immediately reported to the Concentrator
Humidity	Supplied with conformal coating or optional epoxy potting
IP protection	IP67
Power supply Class A	One or two Lithium batteries type-D 3.0VDC or 3.6VDC
Power supply Class C	External from 9 to 60 VDC
Reference	SEZ-XXX (XXX for regional frequency EU868, US915, AS923 Z for LITE or FULL)

Features	Specifications
Smart Operation	Preloaded schedulers (max. 4 per day)
Range	15+km LOS (line of sight) - 2+ km in urban environment
Security	128-bit AES encryption key
Max. emitters per concentrator	128-1000 depending on duty cycles
Max. emitters per project	not limited (each emitter has a unique ID key)
Frequency	License free EU868, US915, AS923
Cable health monitoring	Detection of faulty relay or wire disconnection
Maximum output power	+14dBm (+20dBm for US915)
Data rate	290 bps – 50 Kbps
Data Read	ON/OFF status – battery level – 2x DI, 0-10VDC measurement, enclosure tampering, alarm, temperature, hygrometry, RSSI, etc.
Data Write	ON/OFF command – transmit frequency – schedulers- time sync, etc.
External cabling	Via sealing gland
Mobile App	Free of charge mobile Application for Android and iOS
Network and Network Server interoperability	Orange, Objenious, Loriot, ChirpStack, Kerlink-Wanesy, Comcast, Meshed, TTN, NNNCo, Actility ThingPark, Senet, Digita, …

battery life depends on Rx/Tx frequency and ON/OFF frequency