STREGA
WIRELESS SMART-EMITTER

Extreme range wireless emitter for Pump control

- ⊙ Wireless battery operated LoRaWAN smart emitter for pump operation
- ⊙ Extreme range propagation
- ⊙ Ultra-low consumption 7+ years battery autonomy
- ⊙ Time-controlled watering schedulers
- ⊙ 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

LoRaWAN®
Class A or Class C

Pump On

Remote Control

Pump Off

Time-Controlled

STREGA LoRaWAN Time-controlled Emitter is a battery-operated wireless device with embedded **LoRaWAN®** technology. With its ultra-low-power consumption, the Smart-Emitter can trigger ON or OFF operations of any pump via a reverse polarity relay. The emitter is working on batteries during 7+ years 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:** preloaded ON/OFF schemes

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

- ⊙ **Low consumption:** ultra-low power with 10+ years autonomy

- ⊙ **Tampering:** any misuse is immediately reported

- ⊙ **Mobile Control:** operate your pump directly from your smartphone or tablet

Operate your device securely from your smartphone

Specifications

Features	Specification
Product ID	Time-controlled wireless emitter
Radio technology	LPWAN LoRaWAN 1.0.2 Class A – star-of-stars topology – Class C on demand
Working t°	-20°C...+70°C / -4°F...160°F
Relay support	Reverse polarity 12VDC latching relays (min. 10 Ohm coil resistance
Antenna	embedded
Manual override	Press buttons for local ON/OFF or by approaching a magnet
Extra sensors	Temperature and hygrometry
Duty Cycle	100% continuous rating
Tamper	Enclosure opening is immediately reported to the Concentrator
Humidity	Supplied with conformal coating (IP68 rated) or optional epoxy potting
IP protection	IP67
Power supply	One or two Lithium batteries type-D 3.0VDC or 3.6VDC
Network and Network Server interoperability	Orange, Objenious, Kerlink-Wanesy, Comcast, Meshed, TTN, NNNCo, Actility ThingPark, Senet, Digita, ...
Reference	SE-XXX (XXX for regional frequency EU868, US915, AS923) *battery life depends on Rx/Tx frequency and ON/OFF frequency*

Features	Specification
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
Data rate	290 bps – 50 Kbps
Data Read	ON/OFF status – battery level – device ID – enclosure tampering, alarm, temperature, hygrometry, RSSI, etc.
Data Write	ON/OFF command – transmit frequency – schedulers- time sync
External relay connection	Via sealing gland
Mobile App	Free of charge mobile Application for Android and iOS