



- Wireless battery operated LoRaWAN smart actuator for pump operation
- Extreme range signal propagation
- Ultra-low consumption with 7+ years battery 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 mobile App
- Available in Class A and Class C (no command latency)



STREGA LoRaWAN Time-controlled Emitter is a 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 its embedded AC relay. The emitter will control your pump wirelessly over extreme long distances with exceptional obstacles penetration. Available in EU868, US915 and AS923, the emitter is supporting Class A (battery operated) and Class C (external power supply).



Operate your pump securely from your smartphone or tablet

- → Extreme range: ultra-long range propagation of the signal with deep obstacles penetration (15km+/10+mi. LOS)
- Automatic schedulers: programmable ON/OFF sequences
- ⊕ Embedded 250 VAC/16A bistable relay
- Industrial grade: high 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 is immediately reported
- → Mobile Control: operate your pump directly from your smartphone or tablet



Specifications

	Features	Specifications
	Product ID	Time-controlled wireless actuator for pump control
	Radio technology	LPWAN LoRaWAN 1.0.2 Class A (version LITE) – star-of-stars topology – Class C (version FULL)
	Working t°	-20°C+70°C / -4°F160°F
	AC Relay	Embedded 220VAC relay (max.250VAC-16A)
	Antenna	Embedded (+2.1dB gain)
	Manual override	Press buttons for local ON/OFF or by approaching a magnet
	Extra sensors	Temperature and hygrometry, 2 x Digital Inputs, 0-10VDC measurement
	Duty Cycle	100% continuous rating
	Tamper	Enclosure opening is immediately reported to the Concentrator
	Protection against 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 edition)

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 – device ID – enclosure tampering, alarm, temperature, hygrometry, RSSI, DI, leak detection, etc.
Data Write	ON/OFF command – transmit frequency – schedulers- time sync
Connection to pump	Via sealing gland
Mobile App	Free of charge mobile Application for Android and iOS
Network and Network Server interoperability	Orange, Objenious, ChirpStack, Loriot, Kerlink-Wanesy, Meshed, TTN, Thee Things Industries, The Things Stack, NNNCo, Actility ThingPark, Senet, Helium, Digita

^{*} battery life depends on Rx/Tx frequency and ON/OFF frequency

