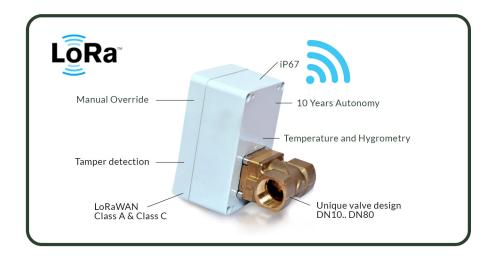


## **Extreme** range wireless Smart-Valve

- LoRaWAN wireless shut-off valve
- Extreme range propagation
- Battery operated with ultra-low consumption 10-15 years autonomy
- Time-controlled automatic operations
- Pipe size from DN10 to DN80 (3/8" to 3")
- Fraud resistant with tamper
- Industrial grade (PN25, IP67, fluid up to 140°C/284°F,...)
- 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



The **STREGA LoRaWAN** Time-controlled shut-off valve is a battery-operated wireless valve with embedded **LoRaWAN®** technology. With its ultra-low-power consumption, the Smart-Valve can be triggered for remote OPEN/CLOSE operations. The valve is working on batteries during 10+ years and through extreme long distances with exceptional deep indoor signal penetration.



Operate your valve securely from your smartphone

- Extreme range: ultra-long range propagation of the signal with deep obstacles penetration
- Automatic schedulers: programmable OPEN/CLOSE operations
  Industrial grade: PN25, cold and hot fluids
- Low consumption: ultra-low power with 10+ years autonomy
- Digital and analog sensors: 2 x digital inputs, one 0-10VDC analog input, temperature and hygrometry sensor,...
- → Tampering: any misuse is immediately reported
- Mobile Control: operate your shut-off valve directly from your smartphone or tablet



## **Specifications**

Features	Specification
Product ID	Time-controlled wireless shut-off valve
Radio technology	LPWAN LoRaWAN 1.0.2 Class A – star-of-stars topology – Class C on demand
Working t°	-20°C+70°C/-4°F160°F
Body and cover	brass
Armature, plunger and core	Stainless steel
Seal material	NBR-FPM-EDPM
Maximum fluid pressure	25 Bars (DN10 to DN32) 20 Bars (DN40 to DN65)
Pipe Section	DN10, DN15, DN20, DN25, DN32, DN40, DN50, DN65, DN80 (from 3/8" to 3")
Minimal differential pressure	125 mBars
Maximum differential pressure	10 Bar
Maximum fluid t°	-10°C+55°C / 14°F 131°F (NBR) -20°C+140°C / -4°F 284°F (EPDM)
Fluid support	Liquids, compressed air, oil-free or dry neutral gases
Cable health monitoring	Detection of faulty valve or wire disconnection
Tamper	Enclosure opening is immediately reported to the Concentrator
Extra sensors	Temperature and hygrometry 2 x Digital Inputs (dry contact) 1 x Analog Input (0-10VDC) 1 leak detection sensor (wired)
IP protection	IP67
Power supply Class "A"	One or two (replaceable) Lithium batteries type-D 3.0VDC or 3.6VDC
Certifications	CE, UL, FCC, ACS, WRAS, DZR, NSF61-FDA, etc.
Public Operator and Network Server interoperability Extra sensors	Orange, Objenious, Kerlink-Wanesy, Comcast, Meshed, TTN, The Things Industries, NNNCo, Actility ThingPark, Senet, Digita, etc.

Features	Specification
Automatic Operations	Preloaded schedulers (max. 4 per day)
Range	15+km/10mi. LOS (line of sight) 2+km/1.5mi. in urban environment 22+ floors in a building
Security	128-bit AES encryption key
Max. valves per gateway	128-1000 depending on duty cycles
Max. valves per project	not limited (each valve has a unique ID key)
Frequency	License free EU868, US915, AS923
Antenna	Internal with +2.1 dB Gain
Maximum output power	14dBm
Data rate	290 bps - 50 Kbps
Data Read	OPEN/CLOSE status – battery level – device ID – enclosure tampering, DI/AI, alarm, temperature, hygrometry, RSSI, etc.
Data Write	OPEN/CLOSE command Transmit frequency Schedulers Time synchronization
Manual override	Press buttons for local ON/OFF or by approaching a magnet
Board protection	Supplied with conformal coating or optional epoxy potting
Form factor	All-in-one or segregated (with cable disconnection detection)
Editions	Full shut-off Trickle (min.50L/h in close) Slow closing (anti-hammer effect)
Valve threads	BSPP or NPT
Power supply Class "C"	External from 9VDC to 60VDC
Mobile App	Free of charge mobile Application for Android and iOS

 $<sup>^{\</sup>ast}$  battery life depends on Rx/Tx frequency and ON/OFF frequency

