

Extreme range **LoRaWAN**® Shut-off Valve

- LoRaWAN wireless shut-off valve
- Extreme range signal propagation
- Battery operated with ultra-low consumption 10-15 years autonomy
- Lorawan Class A and Class C
- 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,...)
- O License free operation on EU868, US915 and AS923
- IoT ready (compliant with all Internet of Things platforms)
- Exceptional signal penetration through obstacles
- Free of charge Android and iOS App



The STREGA 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 (Class A) or limitless on external power supply (Class C). It communicates on extreme long distances with exceptional deep indoor signal penetration.



Operate your valve securely from your smartphone or tablet

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

Specifications (

FULL EDITION



	Features	Specifications
	Product ID	Time-controlled wireless shut-off valve - FULL Edition
	Radio technology	LPWAN LoRaWAN 1.02 Class A and Class C - star-of-stars topology
	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 Bar/363 Psi (DN10 to DN32) 20 Bar/290 Psi (DN40 to DN80)
	Pipe Section	DN10, DN15, DN20, DN25, DN32, DN40, DN50, DN65, DN80 (from 3/8" to 3") - Bigger pipe sizes with EXT-ACPW add-on board
	Minimal differential pressure	125 mBar/1.81 Psi
	Maximum differential pressure	10 Bar/145 Psi
	Maximum fluid t°	-10°C+55°C/14°F131°F (NBR) -20°C+140°C/-4°F284°F (EPDM)
	Fluid support	Liquids, compressed air, oil-free or dry neutral gases
	Cable health monitoring	Detection of faulty solenoid or wire disconnection
	Tamper	Enclosure opening is immediately reported in UPLINK
	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
	Certifications	CE, UL, FCC, ACS, WRAS, DZR, NSF61-FDA, RCM, etc.
	Public Operator and LNS interoperability	Orange, Objenious, ChirpStack, Kerlink-Wanesy, Comcast MachineQ, Loriot, Meshed, TTN, The Things Industries, NNNCo, Actility ThingPark, Senet, Digita, etc.

Features	Specifications
Automatic Operations	Programmable schedulers (max. 4 per day) - Closing on DI/AI changes
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 (+20dBm for US915)
Data rate	290 bps - 50 Kbps
Data Read	OPEN/CLOSE status – battery level, enclosure tampering, DI/AI, temperature, hygrometry, radio signal health, etc.
Data Write	OPEN/CLOSE command, Transmit frequency Schedulers, Magnet enable, Time synchronization, etc.
Manual override	Press buttons for local OPEN/CLOSE or by magnet
Board protection	Supplied with conformal coating or (optional) epoxy potting
Form factor	"All-in-one" or "Segregated"
Models	Full shut-off, Trickle on close (minimum of 50L/h -13 gal/h.), Slow Closing (anti-hammer effect), Direct Acting, Pilot Assisted, etc.
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
Payload format	Ready-to-use JSCRIPT Decoder/ Encoder and CODECS

^{*} battery life depends on Rx/Tx frequency and number of Open/Close operations

