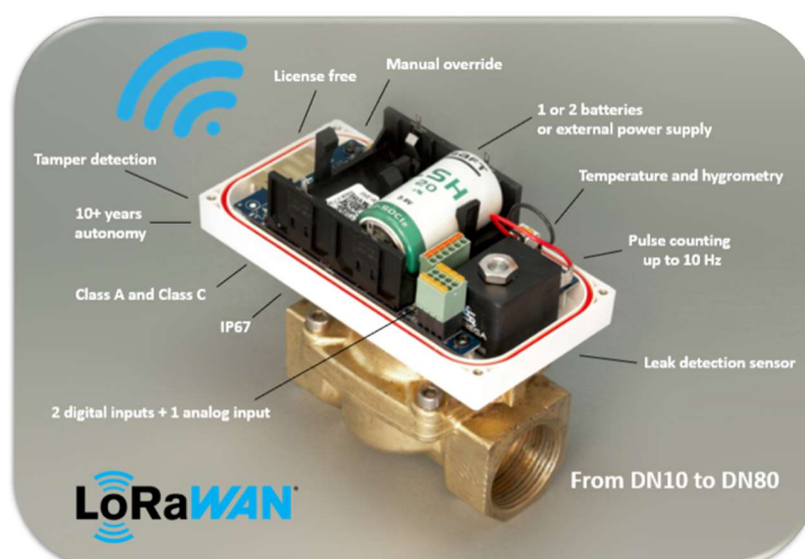




Extreme range LoRaWAN® Shut-off Valve

- ⊕ LoRaWAN wireless shut-off valve
- ⊕ Extreme range signal propagation
- ⊕ Battery operated with ultra-low consumption – 10-15 years autonomy
- ⊕ Smart operations: programmable scheduling, pulse counting, automatic shut-off in case of leak detection, prepaid water, etc.
- ⊕ LoRaWAN Class A and Class C
- ⊕ 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
- ⊕ 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). Automatic smart operations can be programmed on any IO status change. 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 indoor penetration
- ⊕ **Automatic schedules:** time-controlled OPEN/CLOSE sequences
- ⊕ **Smart operations:** pulse counting up to 10 Hz, automatic shut-off on IO change, prepaid water support, etc.
- ⊕ **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 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°F...160°F
Body and cover	Brass
Armature, plunger and core	Stainless steel
Seal material	EPDM - NBR
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°F...131°F (NBR) -20°C...+140°C/-4°F...284°F (EPDM)
Fluid support	Liquids, compressed air, oil-free or dry neutral gases
Models	Full shut-off, Trickle on close (minimum of 50L/h -13 gal/h.), Slow Closing (anti-hammer effect), Direct Acting, Pilot Assisted, etc.
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.
Product reference	SVF-DNXX-YYY-ZZZ-T (XX=pipe size, YYY=EU868/AS923/US915), ZZZ=BSP or NPT, T="all-in-one" or "segregated"

Features	Specifications
Max. valves per project	Not limited: each valve has a unique IEEE identification number
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 cycle
Smart operations	Programmable schedules (max. 4 per day), closing on DI/AI/leak, pulse counting, automatic, prepaid water algorithm, etc.
Pulse counting	Up to 10Hz - Counter value can be retrieved on demand or on periodical UL
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, counter value, etc.
Data Write	OPEN/CLOSE command, Transmit frequency Schedulers, Magnet enable, Time synchronization, counter set, 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"
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
LNS interoperability	Orange, Objenious, ChirpStack, Kerlink-Wanasy, Lorient, Meshed, TTN, The Things Industries, The Things Stack, Tektelic-NS, NNNCo, Actility ThingPark, Senet, Digita, Helium, etc.

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

