STREGA
WIRELESS SMART-VALVE
SMART-PURGE SOLUTIONS

Extreme range wireless Time-controlled Flushing Valve

- ⊙ LoRaWAN time-controlled valve for network purges
- ⊙ Extreme range signal propagation
- ⊙ Battery operated with ultra-low consumption : 5+ years autonomy
- ⊙ LoRaWAN 1.02 Class A
- ⊙ Time-controlled automatic operations
- ⊙ Temperature control for freezing point closing
- ⊙ Pipe size from DN10 to DN80 (3/8'' to 3'')
- ⊙ Fraud resistant with tamper
- ⊙ Industrial grade (PN25, IP67, conformal coated)
- ⊙ License free operation on EU868, US915 and AS923
- ⊙ IoT ready (compliant with all Internet of Things platforms)
- ⊙ Exceptional signal penetration through obstacles
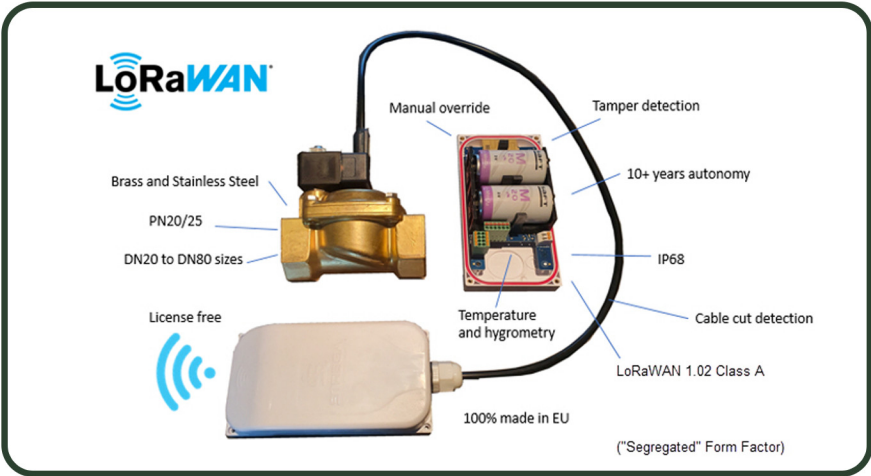- ⊙ Provided with free of charge Android and iOS App

The wireless flushing valve can be installed in a chamber below ground surface and still communicate on extreme distances

The **STREGA LoRaWAN Time-controlled flushing 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 automatic purge operations. The valve can be installed anywhere on the network, working on batteries during 5+ years. Flushing schedules can be modified at any time wirelessly over extreme long distances with exceptional deep indoor signal penetration.

- ➔ **Automatic flushing scheduling:** programmable purge sequences

- ➔ **No local power required:** install your flushing valve anywhere on your network

- ➔ **Extreme range:** ultra-long range propagation of the signal with deep obstacles penetration

- ➔ **Industrial grade:** PN25, IP67

- ➔ **Low consumption:** ultra-low power with 5+ years autonomy

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

- ➔ **Mobile Control:** operate your flushing valve directly from your smartphone or tablet

Operate your flushing valve securely from your smartphone or tablet

Specifications

STREGA
WIRELESS SMART-VALVE

Features	Specifications
Product ID	Time-controlled wireless flushing valve
Radio technology	LPWAN LoRaWAN 1.02 Class A - 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	EDPM
Maximum fluid pressure	25 Bar (DN10 to DN32) 20 Bar (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
Minimal differential pressure	125 mBar / 1.81 Psi
Maximum differential pressure	10 Bar / 145 Psi
Purges remote programming	Automatic purges can be programmed remotely. Flushing can be disabled at any time in case of maintenance
Form factor	All-in-one or Segregated
Cable health monitoring	Detection of faulty solenoid or wire disconnection
Tamper	Enclosure opening is immediately reported in UPLINK
Extra sensors	Temperature and hygrometry - close to freezing conditions can initiate automatic closing
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, RCM, etc.
Public Operator and interoperability	Orange, Objenious, Comcast MachineQ, Meshed, NNNCo, Senet, Digita, etc.

Features	Specifications
Automatic Operations	Programmable purge scheduling (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 (+20dBm for US915)
Data rate	290 bps – 50 Kbps
Data Read	OPEN/CLOSE status – battery level, enclosure tampering, temperature, hygrometry, radio signal health, etc.
Data Write	OPEN/CLOSE command, Transmit frequency Scheduling flushing, 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, gal/h.) - Slow Closing (anti-hammer effect) - Direct Acting, etc.
Valve threads	BSPP or NPT
Mobile App	Free of charge mobile Application for Android and iOS
Payload format	Ready-to-use JSCRIPT Decoder/ Encoder and CODECS
LoRa Network Server (LNS) compliancy	ChirpStack, Loriot, Kerlink Wanesy, TTN, The Things Industries, Orange Live Objects, Actility Thingpark, Helium, ...

* battery life depends on Uplinks frequency and number of flushing operations