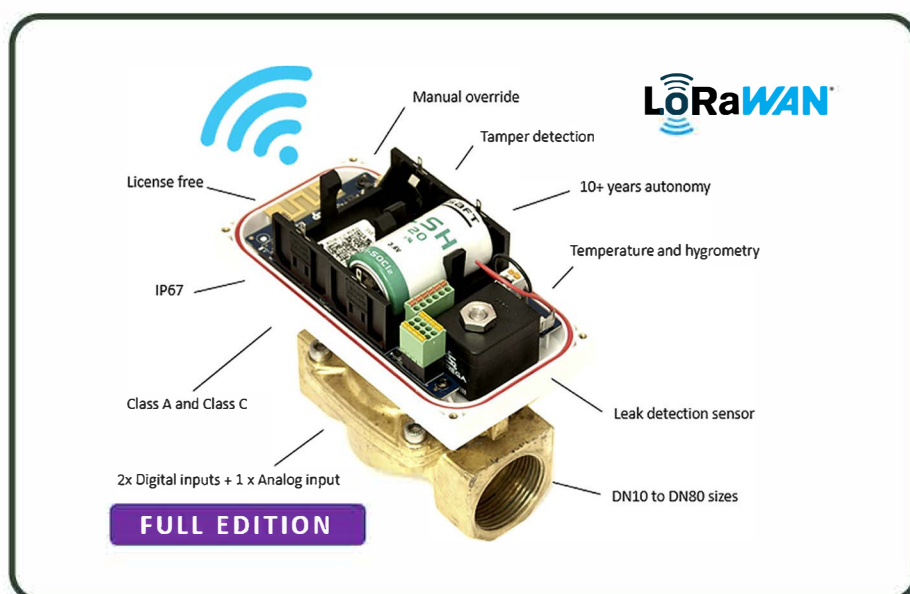




## Extreme range LoRaWAN® Shut-off Valve

- 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,...)
- 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
- 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 - <b>FULL</b> 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                            | NBR-FPM-EDPM                                                                                                                                                 |
| Maximum fluid pressure                   | 25 Bar/363 Psi (DN10 to DN32)<br>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)<br>-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 solenoid or wire disconnection                                                                                                           |
| Tamper                                   | Enclosure opening is immediately reported in UPLINK                                                                                                          |
| Extra sensors                            | Temperature and hygrometry<br>2 x Digital Inputs (dry contact)<br>1 x Analog Input (0-10VDC)<br>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-Wanasy, Comcast MachineQ, Lorient, 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)<br>2+km/1.5mi. in urban environment<br>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

