

OUTDOOR

DC LATCH

SOLENOID DRIVER



SENLAB™ V IS A DC LATCH SOLENOID DRIVER

WITH A LORAWAN™ COMMUNICATION INTERFACE.

IT IS DESIGNED FOR 9-12V DC LATCH SOLENOIDS.

Ref : SVC-LAB-13NS



+ 20 years

15 km \* IP66 (Outdoor use)

Local or Public Network compliant

\* Depending on the operating conditions

Senlab™ V allows to control either a single 2-wires DC latch solenoid, or a single 3-wires DC latch solenoid, or two 2-wires DC latch solenoid. It is able to check the good execution of orders through dry contact interfaces (one per solenoid) and count pulses from a single water meter.

This Senlab offers best in class features as :

- **Battery Life time**
- **Rich Data Content**
- **Radio Performances**
- **Advanced set of functionalities (see on verso)**

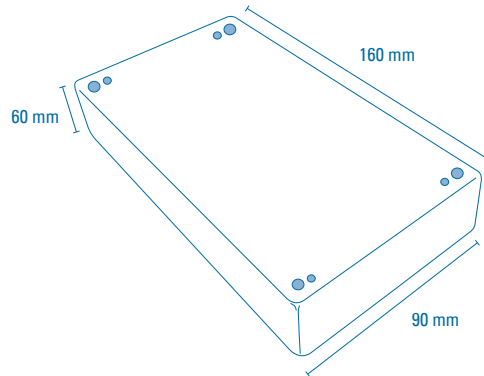
## TYPICAL APPLICATIONS

- Drive your hydraulic equipment
- Plan and schedule your irrigation
- Smart Irrigation
- Control the solenoid valve remotely (opening/closing)

## TECHNICAL SPECIFICATIONS

|   |                         |  |
|---|-------------------------|--|
| Physical specifications                                   | Dimensions              | 102 x 56 x 35 mm   |
|   | Weight                  | 458 gr   |
|   | Operating temperature   | -20°C to +55°C   |
| RF specifications   | RF sensitivity          | -137dBm  |
|   | RF power                | +14dBm (25mW)  |
|   | Radio band              | 868 MHz  |
| EC Conformity : Compliant with Directive 2014/53/UE (RED) | EMC                     | Final draft EN 301 489-3 v2.1.1<br>Draft EN 301 489-1 v2.2.0 |
|   | Radio                   | EN 300 220-2 v3.1.1  |
|   | Magnetic field exposure | EN 62479   |
|   | Safety                  | IEC 60950-1, EN 60950-22                                     |

## DIMENSIONAL DRAWING



## TECHNICAL FEATURES FOCUS

### Driving capabilities

- Orders for opening or closing the valves can be sent directly by downlink messages
- The local maintenance interface also allows requesting some orders through the Senlab V UHF link
- Possibility to program some driving patterns through specific downlink messages
- 10 to 20 opening slots in a single downlink message
- Cycle option

### Installation & configurability

- Senlab V periodically logs and transmits :
  - The state of dry contact inputs (reports on valves states)
  - The index of the water meter connected to the pulse input
  - The last order executed on each of its drive outputs
- From start, transmission happens every 5 mn for installation convenience
- In operational mode, this transmission period can be configured up to one hour per 5 mn steps
- Senlab V can also transmit a specific event frame for each or the last order executed on each of its drive outputs

## BATTERY LIFE DURATION ESTIMATION

**A single Valve managed - 10 open/close cycle per day**

| Battery life (years) | Tx every 5mn | Tx every 15mn | Tx once an hour |
|----------------------|--------------|---------------|-----------------|
| SF7                  | >20          | >20           | >20             |
| SF8                  | >20          | >20           | >20             |
| SF9                  | >20          | >20           | >20             |
| SF10                 | 16,4         | >20           | >20             |
| SF11                 | 10,3         | 19,4          | >20             |
| SF12                 | 6,0          | 12,6          | >20             |

**Given only as preliminary information.**