



SMART SOLAR POWERED IOT VALVES FOR DIGITAL FARMING

Spherag is an innovative combination of hardware & software where an autonomous and bidirectional management platform, communicates in real time remotely with solar powered devices deployed in agricultural facilities, allowing a fully digitalized farm management, not only monitor but acting on the farm.

Data Sheet Spherag

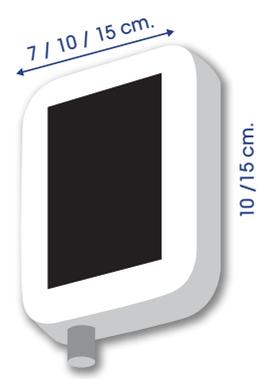
Connectivity	NB IoT
Maximum voltage	4,2 V
Minimum voltage	3,4V
Nominal voltage	3,7 V
Nominal current	5 mA
Battery capacity	5000mAh
Solar cell voltage	4 V
Solar cell current	100 mA
Output voltage	14 V
Output pulse time	100 ms

Technical Data Sheet Spherag Smart Valve

Battery technology	Li-Po
Battery	3,7V, 5AH
Weight & Dimensions	250 gr (1/2St) – 100 x 100 mm
Output Voltage	Latching Solenoid – 14V
Protection code	IP67 *
Infrastructure	No
Energetically	Energy self-sufficient
Output control	Real Time
Programming mode	Yes
Number of outputs	1 / 2 / 4 / 8
Flow meter	1
Pressure Gauge	1
Operating temperature	ABS -10° to 50°C

- ⦿ Quick & easy installation: Plug, Play & Enjoy
- ⦿ Agroclimatic weather forecast
- ⦿ Satellite Index – Remote sensing included NDVI, NDWI, ...
- ⦿ Two operating modes: Real-time connection & scheduled intervals.
- ⦿ Fully bidirectional real-time system
- ⦿ Programmable pulse counter for monitoring water consumption
- ⦿ Customizable via API
- ⦿ Life time battery (solar panel option)
- ⦿ LTE / CATM / 2G - 3G - 4G
- ⦿ Programming based on weather forecast, sensors or water consumption
- ⦿ Remote flow rate / pressure monitor
- ⦿ Compatible with a wide range of latching solenoids : Baccara, Bermad, Netafim, Irritrol ...
- ⦿ No distance constraints

No distance constraints for remote real time operation!



ATLAS is a web based irrigation device based on LTE technology to remotely operate irrigation fields or any other automation system of a farm or residential area.

Link sensor data like soil moisture, temperature, relative humidity, wind, rain, water counter, pressure transducers etc.

OPTIONS

- Watering hours, minutes and seconds.
- Possibility of flow rate based programming.
- Possibility of independent or sequential programs.
- Possibility of window programming.
- Up to 10 daily starts.

- Group valves
- 1 / 2 / 4 Stations
- Pulse flow meter output
- No maintenance needed

