

### In brief

**Kind** : Telemetric net for drinking water monitoring

**Where** : Municipality of Prespes

**Πότε** : April 2021

### Administrator

Municipality of Prespes

### Important

Fully automated, no operator required



### Project ID:

Supply of equipment for the quantitative control of water pumped or offered from surface sources, which is distributed by five (5) irrigation networks of the settlements of the Municipality of Prespa: Agios Germanos, Karyes, Antartiko, Trigono, Pisoderi.

In addition to the initial parameters, the installed network will be able to measure additional parameters in the future.

Weather stations and rain gauges can be connected to the network. So the center will be able to automatically calculate the evaporation and the need of the greenery / trees for water. In this way, it will be possible to optimize and automate the irrigation of the greenery, resulting in the saving of water and energy for its pumping.

The network can accept directly and without changing the software or transmitters or any other structural element, sensors and instruments for measuring the following quality parameters

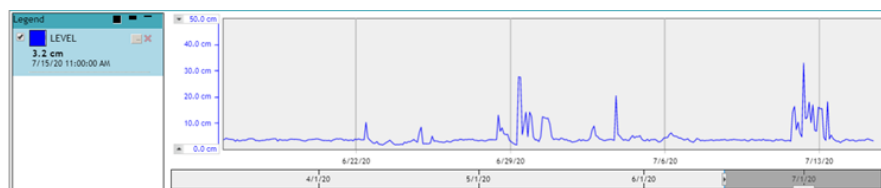
- Conductivity,
- Temperature,
- pH,
- Turbidity,
- TOC,
- TDS,
- TSS,
- Color

and any other water quality parameter.

The network automatically calculates the daily, weekly and monthly quantity of circulating water, for each settlement and for all settlements.

The software automatically notifies of any exceedances or other conditions via electronic message (e-mail). The measurements will be updated every 10 minutes. The measurement center is located in the town hall. The relevant software has been installed on a server of the Municipality of Prespa.

The processing and visualization of measurements is based on the most complete and reliable addVANTAGE Pro platform.



**Supply and installation of special water supply network management equipment of the SMARTWATERSAVE operation" for the needs of the sub-project WP4(4.1.1.) of the Operation: "SMARTWATERSAVE" which has been included in the Operational Program "INTERREG GREECE-REPUBLIC OF NORTH MACEDONIA" based on Incorporation Decision with no. prot. 88525/23-08-2018 of the Ministry of Economy & Development and has received MIS code 5033054.**



### Water meters

- Measuring temperature 0 – 40°C.
- Suitable for drinking water.
- It has a pulse output for connecting it to the telemetry system. It is of the flanged type.
- It has a dry gauge.
- It has a rolling digit meter, non-resettable, where the total supply is recorded.

### Pressure reducers

- One at the entrance of each settlement.
- They can regulate the pressure to lower levels than the inlet pressure.

### Electric Valves

- The diaphragm is made of nylon material and has an elliptical shape and ensures complete waterproofing without external pressure.
- Self-defining filter that supplies clean water to the control system.

### Portable Flow Meter

- Portable flow measurement system for open channels or even for open water pipes.
- Measuring range: from 0.1 to 6.1 m/sec.
- Measurement accuracy: 3.048 cm/sec.

### Center for receiving and processing data

- Ability to send commands to the stations.
- It can support receiving measurements via GSM / GPRS, UHF wireless and combination of the above.
- Can handle up to 1000 stations.
- Ability to create an alarm condition in which at least five (5) parameters can be involved.
- Operating temperature -10C to +55C.
- It has an energy backup system which can maintain the operation of the system for 24 hours in the event of a power outage.
- Can be connected to external analog modems.
- Allows multi user access via internet.



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