



## The low-powered ultrasonic dBi6 is the transducer of choice for Silistra Municipality.

Pulsar Measurement's Bulgarian sales partner, Sigma Ltd., were recently contacted about a project in the Silistra Province to provide instrumentation for infrastructure monitoring and a new rollout of an early warning program for floods and droughts.

Silistra Municipality contacted Sigma regarding the first phase of an infrastructure and early warning program. The utility required reliable and proactive monitoring, that was capable of providing advanced data and event processing functionality, to manage the threat from flooding and droughts along the Danube River. It was specified that the solution must provide operations functionality for locations without power supply from the grid, measured and forecasted water level, visual monitoring, and early warning and alert management.

The main objective of this project was to provide the best water level prediction system, and to install the relevant smart alarms and early warnings for three dams so that users may take appropriate actions and optimize water infrastructure management decisions.

Sigma was pleased to be able to offer the municipality our low-powered dBi intelligent transducer range as an OEM solution. Combined with a low-powered RTU logging device, the dBi range is able to measure the water level at extremely low power consumption, which was a key specification from the municipality. The data obtained by the dBi transducer is collected by the RTU logging device through a single loop-powered analog connection, with the data then communicated to the telemetry platform through 3G/GPRS and DNP3 protocol.

The dBi transducer with the RTU logging device allows for remote monitoring and control of the three dams based on data and events recorded. The operational functionality meets the low power requirements specified by the municipality and requires no power supply from the grid. The addition of the DNP3 protocol resulted in no telemetry data loss or back-filling of the DNP3 master database.



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Deyan Partinov, Regional Sales Manager, Pulsar Measurement

Monitoring the water level allowed the municipality to predict water levels and gain early flood warnings, ultimately resulting in reduced time for reaction to critical events; meaning overall water infrastructure safety for the province was greatly improved.

Working closely with Sigma on the project, Deyan Partinov, Regional Sales Manager for Eastern Europe said "Our partners, Sigma, provided an attractive dam monitoring solution, implementing non-contacting water level measurement based on dBi6 intelligent, low-power, ultrasonic transmitter, and water level prediction and early flood warning functionality. Based on the successful project results, Silistra Municipality invited Sigma for further discussions regarding the second phase of the project, which will include the monitoring of more dams and river Danube."



## More Information



### dBi HART Intelligent Transducer Series:

<https://pulsarmeasurement.com/dbi-hart>

### Sigma Ltd:

[http://sigma.bg/contact\\_en.html](http://sigma.bg/contact_en.html)

Sigma has been a part of the Pulsar Measurement partner network for more than 20 years, founded in 1996 they have a team of highly qualified specialists, software and hardware engineers and provides integrated measurement solutions for a wide range of industries.



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