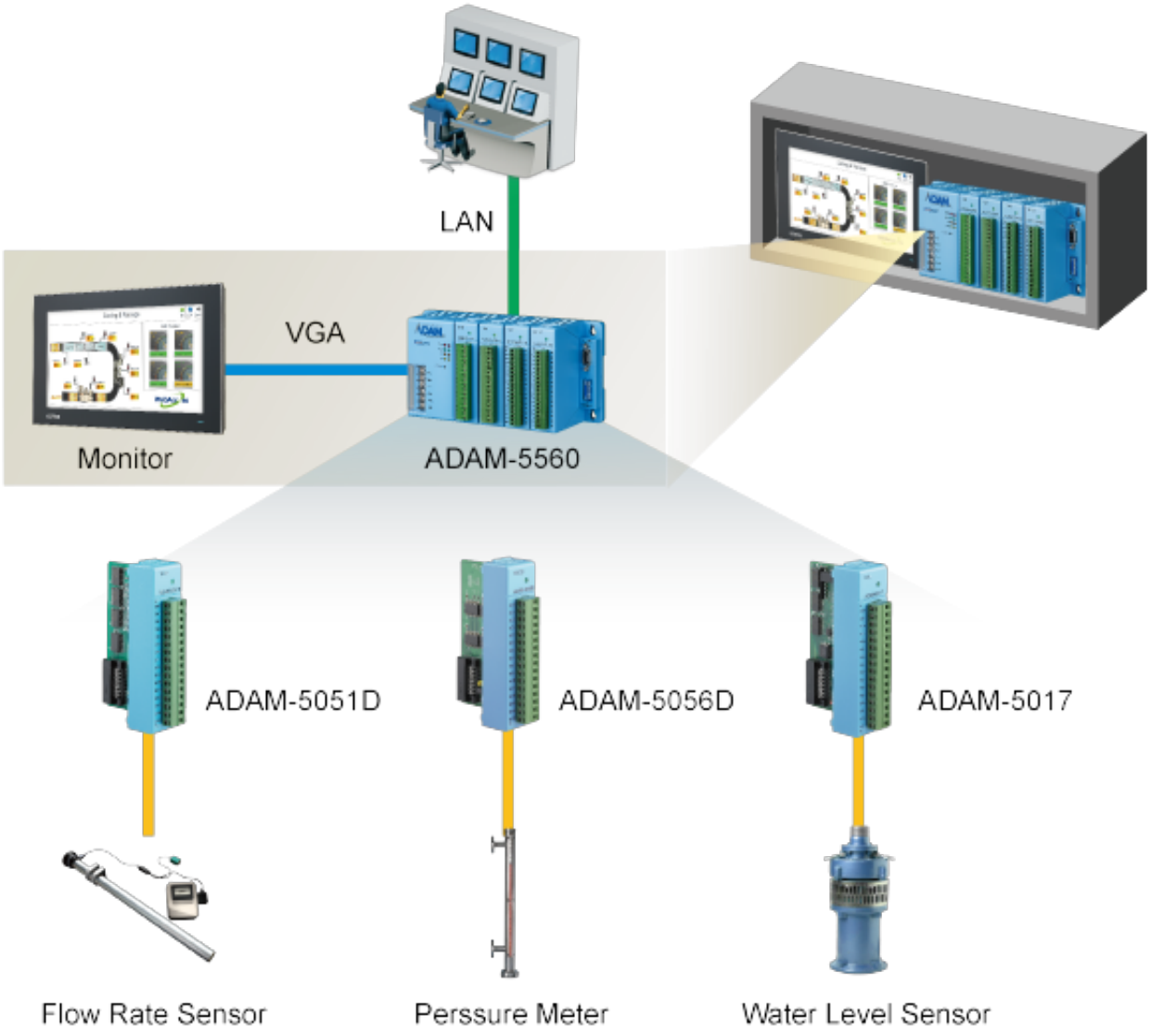
River Flow Monitoring

Our client required a system which had proven reliability and would be capable of withstanding harsh environmental in remote locations.



Market: Water Treatment
Location: Spain

Project Introduction

In mountainous regions around the world heavy rainfall can cause the flooding of rivers much further downstream thereby causing major problems to residents and businesses. Many governments around the world have taken steps to actively protect people?s livelihoods and property with the expansion of early warning systems and emergency response systems to reduce the impact of natural climate changes.

System Requirements

In Spain, the government is trying to protect their citizens from rising levels of the rivers that flow down from the Pyrenees and have installed sensors along every kilometer of the rivers to measure the water levels. Our client required a system which had proven reliability and would be capable of withstanding harsh environmental in remote locations.

System Implementation

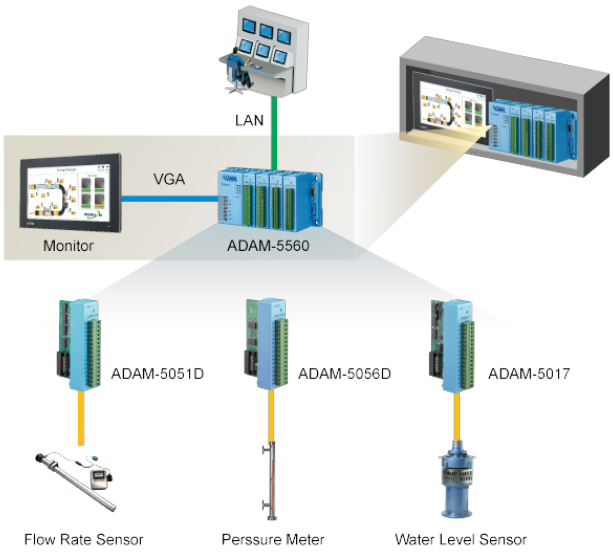
From the sensors installed along the sides of the rivers, the information is relayed to a cabinet in which is installed four ADAM modules which analyze the data and then send it back to central control room.

The ADAM-5560 is a Programmable Automation Controller which can be used by engineers to access the information from the sensors on an installed monitor. It is also used to analyze the data before sending it on to the remote server.

With sixteen digital input channels with LED indicators the ADAM-5051D and ADAM-5056D are used to monitor the working condition of the sensor.

By accepting multiple voltage and current inputs the ADAM-5017 is used for measuring the tidal height.

System Diagram



Conclusion:

The customer has been using Advantech products in other projects and is familiar with the ADAM series? reliability.
For this project the features of the ADAM-5560 was one of the key factors in winning this bid.