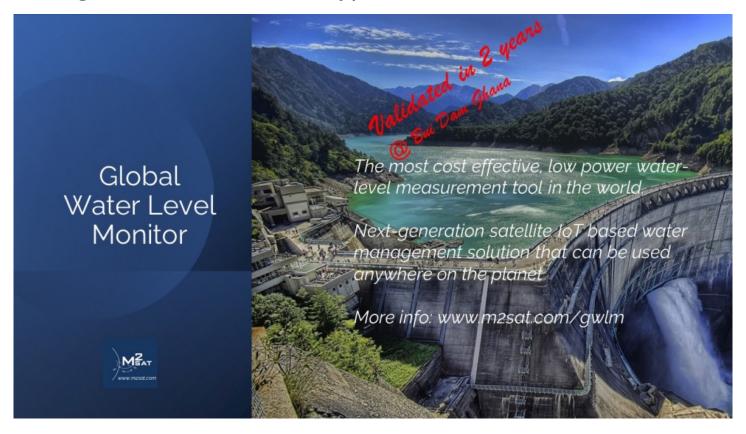
M2sat introduces the Global Water Level Monitor (GWLM)

Providing reliable water level data from any place in the world.



Gulpen-Wittem, Limburg Oct 5, 2023 (Issuewire.com) - M2sat is a longterm satellite system integrator from the Netherlands, focussed on satellite IoT solutions for environmental monitoring and Hydro-Met observation platforms. We have developed the M2sat IoT Platform to support easy hydromet application development. The M2sat GWLM is the first water management solution we launched, with several others in the pipeline. Check www.m2sat.com for more information.

The flood damages challenge

Climate change has a huge effect on the weather and the water households worldwide. Flooding and droughts are becoming more frequent and are causing increasing damage. According to Floodbase.com flood damages in 2021 were around Euro 80 Billion and the total of economic activity at risk of flooding by 2040 will be Euro 15 Terra.

To prevent damage, better monitoring of water levels will be critical in the future. The earlier you know a flood is coming, the earlier warnings can be sent out, the lower the damage.

This means water authorities, local/regional/national government agencies, National Hydro-Met Services organisations or emergency response agencies will need Water Level Monitoring tools. In a recent report from the United Nations Framework Convention on Climate Change (UNFCCC), data collection from Hydro sensors like water level monitoring is the number one priority for climate adaptation. Only 15% of the world is covered by terrestrial IoT networks however preventing Hydro Sensors from sending back their valuable data e.g. on water levels. Satellite IoT however can connect

sensors everywhere in the world.

Introducing the M2sat Global Water Level Monitor.

Using state-of-the-art water-level sensors, onboard edge processing and satellite IoT connectivity M2sat has developed the world's most cost-effective and low power water-level monitoring solution. Developed in close collaboration with the TU Delft Hydrology department and Tahmo.org the M2sat GWLM went through an extensive 2 year validation period along the Black Volta River in Ghana,

The GWLM can be used for worldwide water management applications like:

- Hydro-dam level management
- Flood Monitoring
- Agricultural Water Level Monitoring

Easy-to-install and easy-to-use

The complete GWLM includes 3 boxes including an acoustic water-level sensor with arm, the M2sat IoT Communicator with on-board edge processor and a satellite modem. Power supply is via standard batteries and solar power panels that can be sourced locally. The hardware is easy to install using a standard TV dish foot and piping.

Water levels are measured using the acoustic sensor and the data are sent to the M2sat IoT Communicator. The onboard edge processor processes the sensor data to reduce the data volume and selects the most optimal satellite network to transmit the data via satellite

In default mode, the GWLM provides 24 hourly water level measurements that are sent back via satellite. The measurement and transmission schedule is configurable, however. The GWLM also has programmable alarm thresholds that trigger alert messages for immediate transmission when required.

You will receive the water level data via a dashboard, or by mail.

As such The Global Water Level Monitor is the first validated e-2-e solution over the M2sat IoT Platform. More Hydro Sensors are under development.

M2sat IoT Platform

With more than 40 satellite IoT networks in the market (or coming to the market) the choice of a cost effective and future proof satellite IoT network is not easy.

The M2at IoT Platform is designed to reduce the complexity of satellite IoT networking and makes application development easy, The platform supports Iridium, Inmarsat, Astrocast, Swarm and LTE networks. For all networks, however, it provides one single interface for sensors in the field and one single API to retrieve sensor data for your application server. This way customer staff can focus on the development of the water management applications, new sensors, and data-analytics.

Company Description

M2sat was founded in 2004 as a satellite system integrator. Our parent companies have been active in satellite communications since the early 1990s.

With a strong background in research and development in ESA and EU projects, over time M2sat has developed a range of e-2-e satellite solutions with a current focus on satellite IoT.

The company provides satellite IoT solutions for Environmental Monitoring and Hydro-Met Networks based on the M2sat IoT platform that was developed inhouse.

Contact

If you want to keep you up to date with these developments: Visit the M2sat website: www.m2sat.com or send an e-mail to info@m2sat.com for the latest information.

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