Prepared for heavy rainfall with IoT

Spekter offers hazard maps and an early warning system for heavy rainfall events. For this, IoT sensors measure precipitation and runoff behaviour in rivers and canals.

Challenge

Heavy rainfall events are increasing due to climate change. Enormous amounts of water fall within a short time and can have devastating consequences for people, nature and infrastructures. The software company Spekter offers an alarm system for such events. IoT sensors measure precipitation and water levels and give an early warning when critical values are exceeded. Prerequisite for the system to work: self-sufficient data transmission units with powerful networking and robust SIM cards that can withstand extreme weather conditions.

Solution

Spekter relies on NarrowBand IoT (NB-IoT) from Telekom for the networking of precipitation and water level gauges. Thanks to its deep penetration, the machine and sensor network sends information autonomously, reliably and energy-efficiently from underground manholes or subways. The data runs directly to the cloud for AI analysis. A robust industrial SIM ensures that the measuring units' function perfectly even when water levels rise.

Customer benefit

Spekter's early warning systems are stably networked via NB-IoT at all times. Fallback solutions and national roaming provide additional security. This enables the company to offer a reliable warning system in extreme weather. With Telekom, Spekter has a strong partner at its side: thanks to the broad national as well as international availability of NB-IoT, the company is optimally positioned for its rapidly growing customer base in Germany as well as for international expansion.

> " In order to inform all those affected and the emergency services simultaneously and, above all, in good time in the event of an emergency, we need strong communication structures. Telekom offers us these.
>
> **Reinhard Brodrecht**, CEO, Spekter GmbH

Software development

SPEKTER
WERTE UND MENSCHEN SCHÜTZEN