

## SHM- Smart Hydrant Master

The Smart Hydrant Master looks exactly like the well-known conventional Hawle H8 hydrant, but it is capable of taking measurements that are useful and important for water network operators. Its main advantage is that the fire hydrant is connected to the piping network, but is located above the ground, so that it can be well integrated into the IoT communication system and at the same time performs its original function. The device measures the pressure, the authorized and unauthorized use of the hydrant, thus the time and duration of loading and unloading can be calculated, which are all essential information for the operators. These data show relationships between parameters that were not available to measure in the past, as no device was available that could run on battery power for years.

**The SHM can be installed** easy installation as a replacement of existing hydrant

- at pipe reconstructions as new hydrant installations
- where pressure measurement is important but shaft construction is not feasible
- where waterworks provide constant waterflow to the partners
- where illegal water discharge may occur
- at different points in the DMA where measurements are made through the hydrant
- at the border of pressure zones
- at endpoints, high and low points of areas
- at critical points where pressure fluctuations occur
- in end branches where mains rinsing is carried out regularly



Communication	
Transmission options	Nb-IoT/LoRaWAN
Antenna	Internal, in the housing
Transmission frequency	Down to 5 minutes, typical 1 hour
SIM type	eSIM
NFC communication	13.56Mhz
Sensors	
Water sensor	Dual water level sensors for sensing hydrant state (bottom, top)
Pressure sensors	1
Pressure range	0-20bar
Accuracy	±1%
Protection	IP69K
Battery	
Internal battery	3,6V
Battery chemistry	Lithium Thionyl Chloride (non rechargeable)
Environmental	
Operating temperature	-20 - 85 °C
Ingress protection	IP67 at the top IP 69K on the sensors
Physical	
Dimensions	82x80x55
Weight	600g
Connection	DN80/DN100
Length	1000/1250/1500