NOVEMBER 2022

# INTELOGX™
# Data Capture and Analysis

Piedmont GENESYS PWT™

DISTRIBUTOR SUMMIT

NOVEMBER 13-17, 2022

# *> 90% of utilities say that adopting digital solutions is a very high priority*

***(Source: Amane Digital survey 2017)***

Focus of digital strategies:

- Prevent issues
- Allow real time event management
- Extend life of assets
- Reduce operating and labor cost

# INTRODUCTION

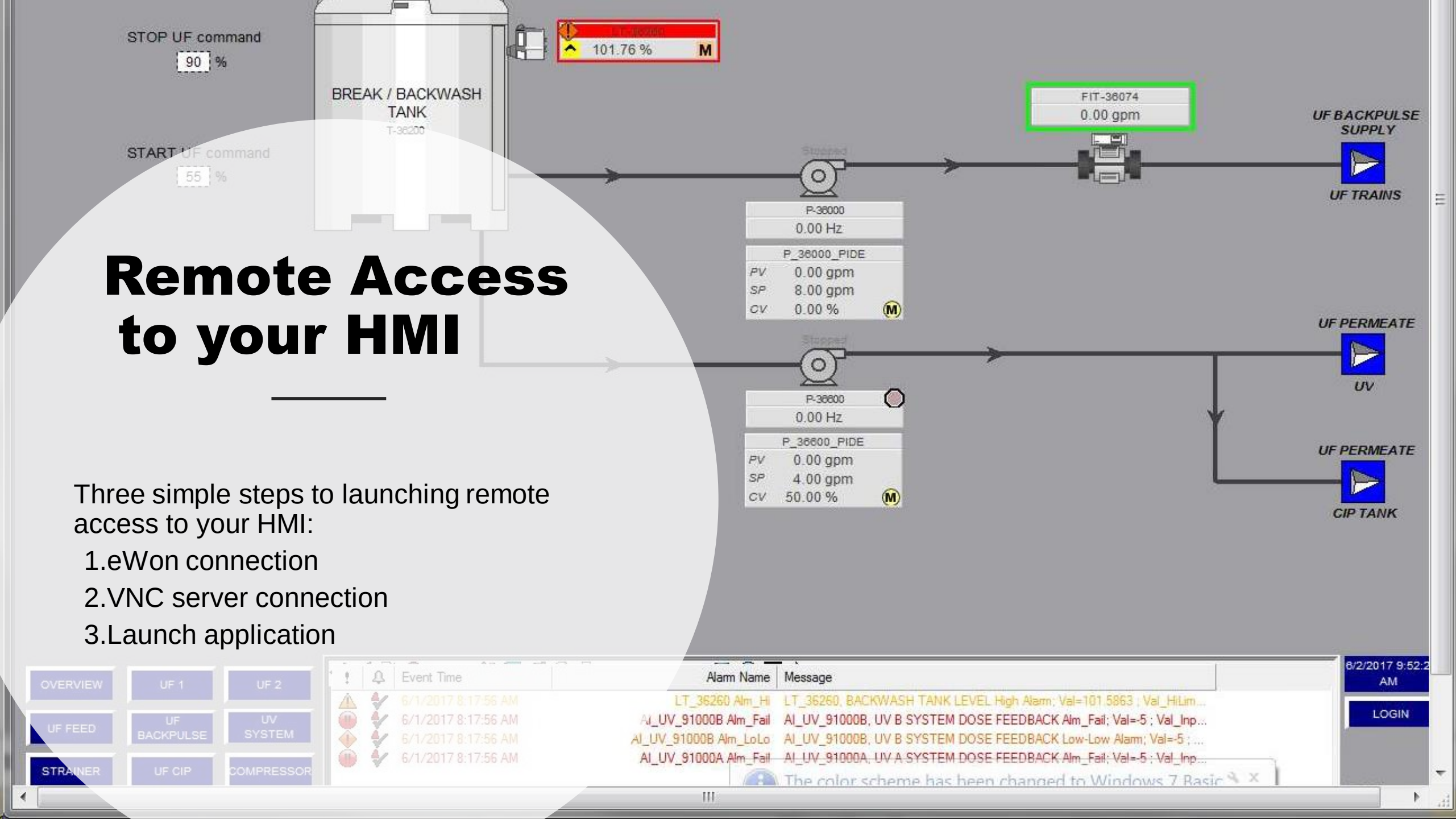
$H_2O$ Innovation has developed a digital solutions using technology to support the **optimization of water treatment plants**. With our unique digital tools, plants can **shift to the next level** of **comprehension** and **care**.

Our **Intelogx™ is the key** to engaging customers more closely, improving onsite and remote service support, and extending equipment life. Fully understanding the **health of your system** becomes simple with **Intelogx™**.

intelogx™

Adds a centralized data acquisition system to manage your plant's data.

- All your data logged and securely stored on a central $H_2O$ Innovation server
- Clear status indication of every analog signal on every water system in your plant
- Customizable historical trends, alarm notification via email or SMS and web access to dashboard, trends, and reports
- RO normalization based on industry standard calculations
- Pattern recognition determines the effectiveness of each CEB/CIP and predicts when cleaning will next be required



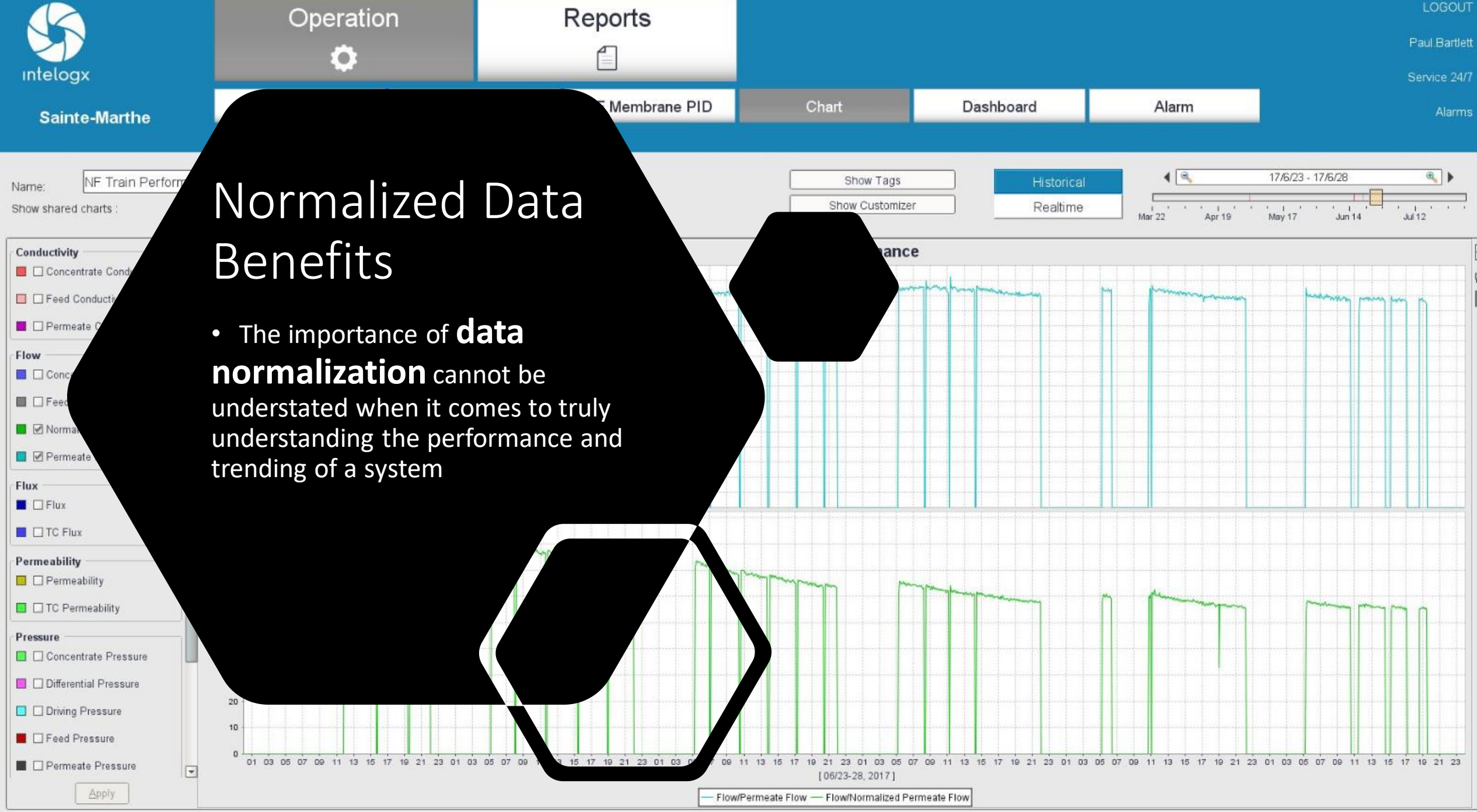

# Remote Access to your HMI

Three simple steps to launching remote access to your HMI:

1. eWon connection
2. VNC server connection
3. Launch application

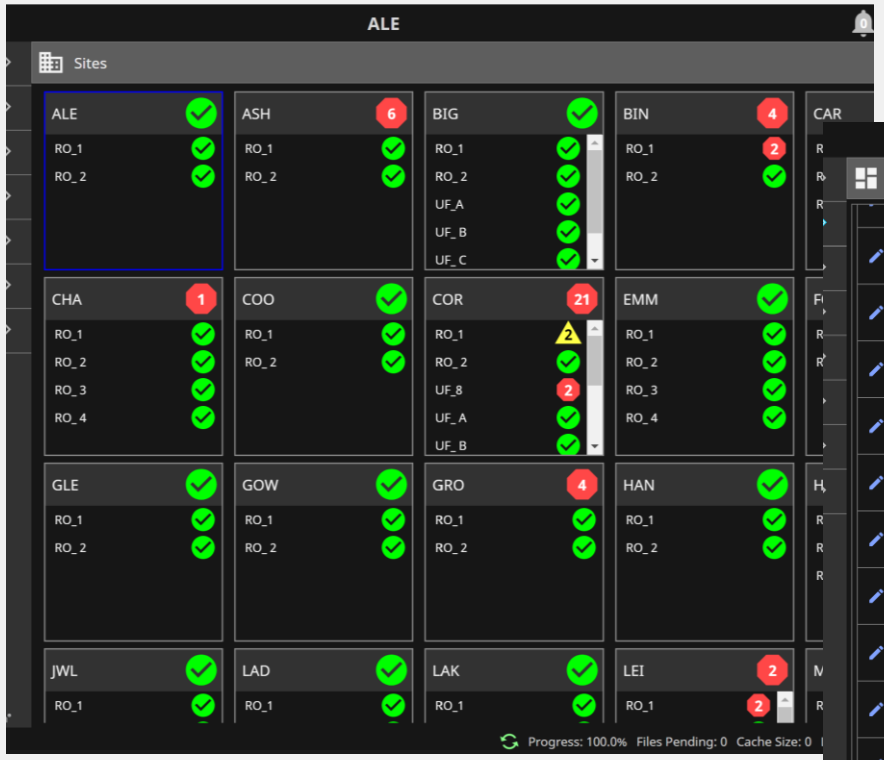
# Normalized Data Benefits

- The importance of **data normalization** cannot be understated when it comes to truly understanding the performance and trending of a system

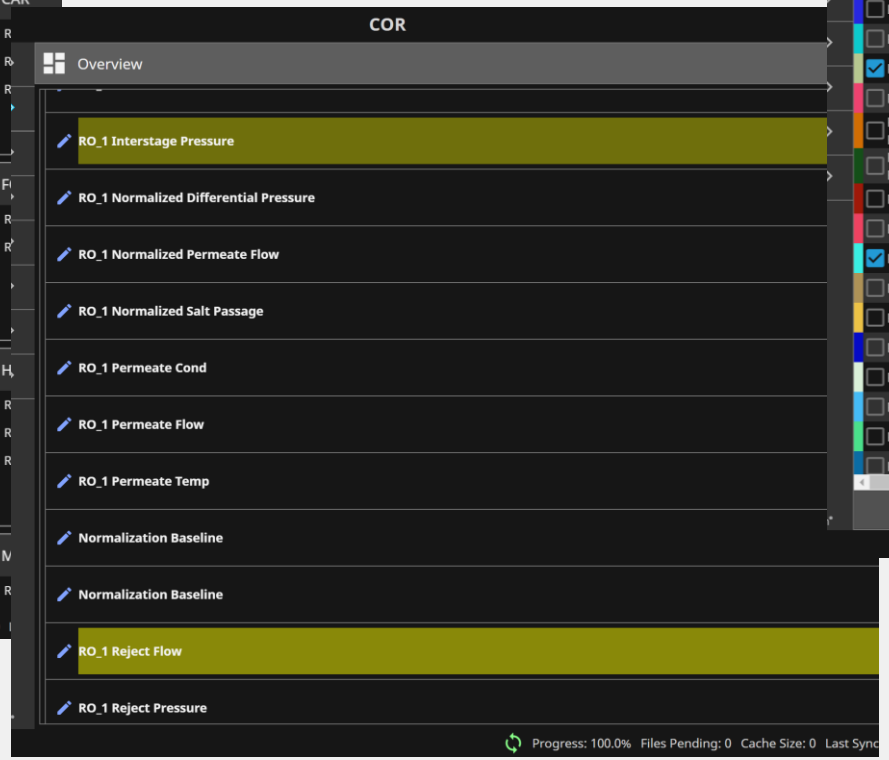


intelogx™

## Monitor Multiple Systems on a Single Screen




## Alarm Notifications

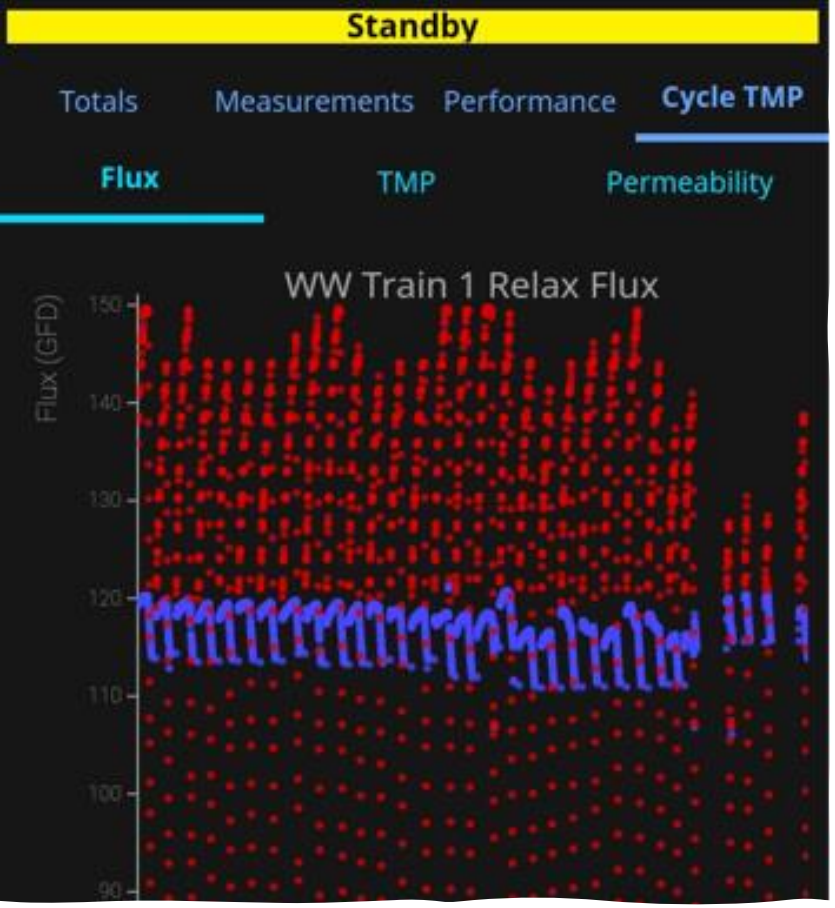


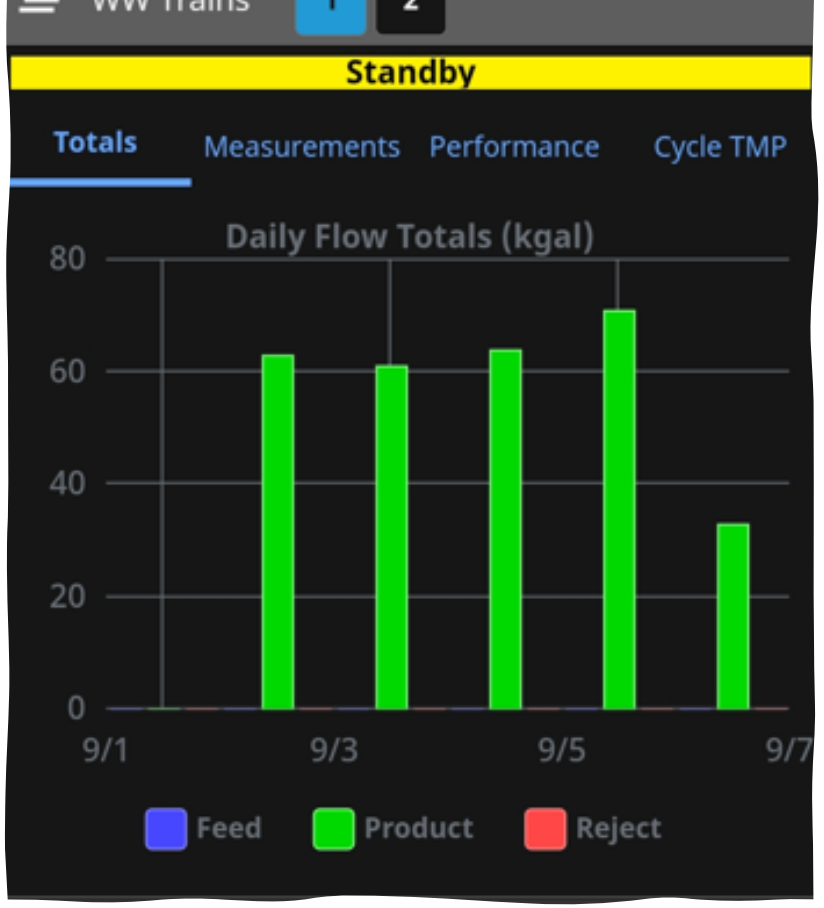

## Customizable Trending

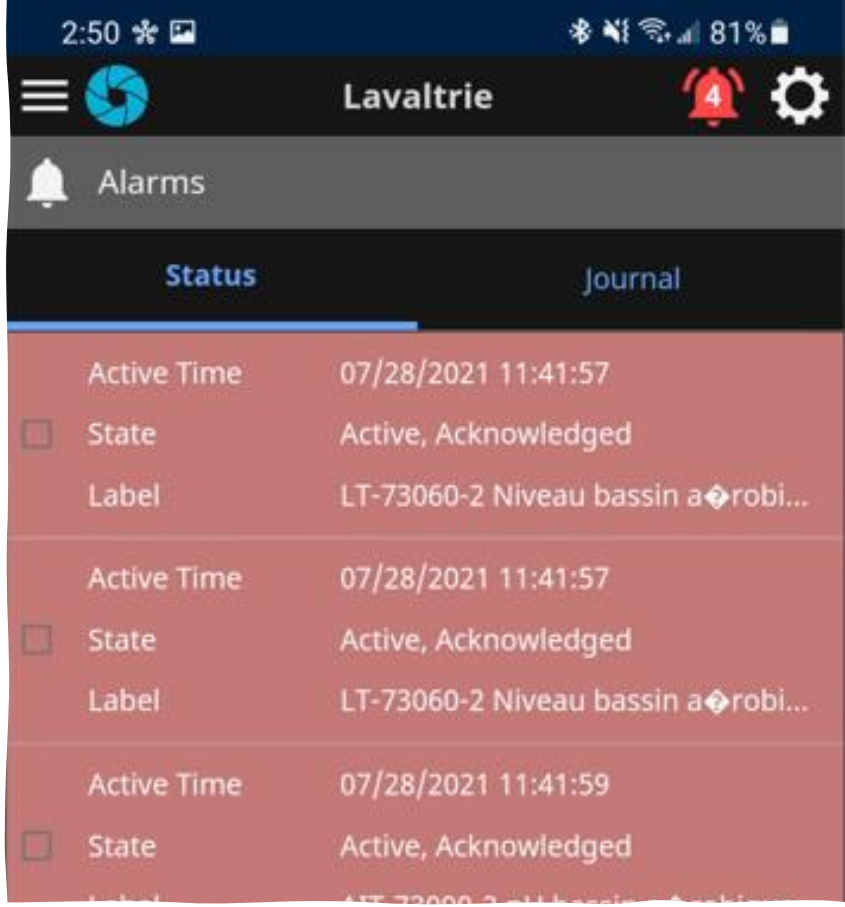
DISTRIBUTOR SUMMIT BILBAO



https://intelogxweb.h2oinnovation.com/data/perspective/client/D2DB/




# IntelogX™ - Mobile

- Formatted to be easily readable on tablet or phone

# Rapid Deployment

- Advantec Industrial PC with Ignition 8.2
- eWON remote connection device ready to communicate with PLC/SCADA
- 24V DC power supply
- AB PLC (if needed) to communicate to plant control system

# EventMobi

**Would a data collection and predictive analysis tool be useful to help you grow your business?**

1. **Yes**
2. **No**
3. **Maybe**

h2o innovation®

Piedmont GENESYS PWT™

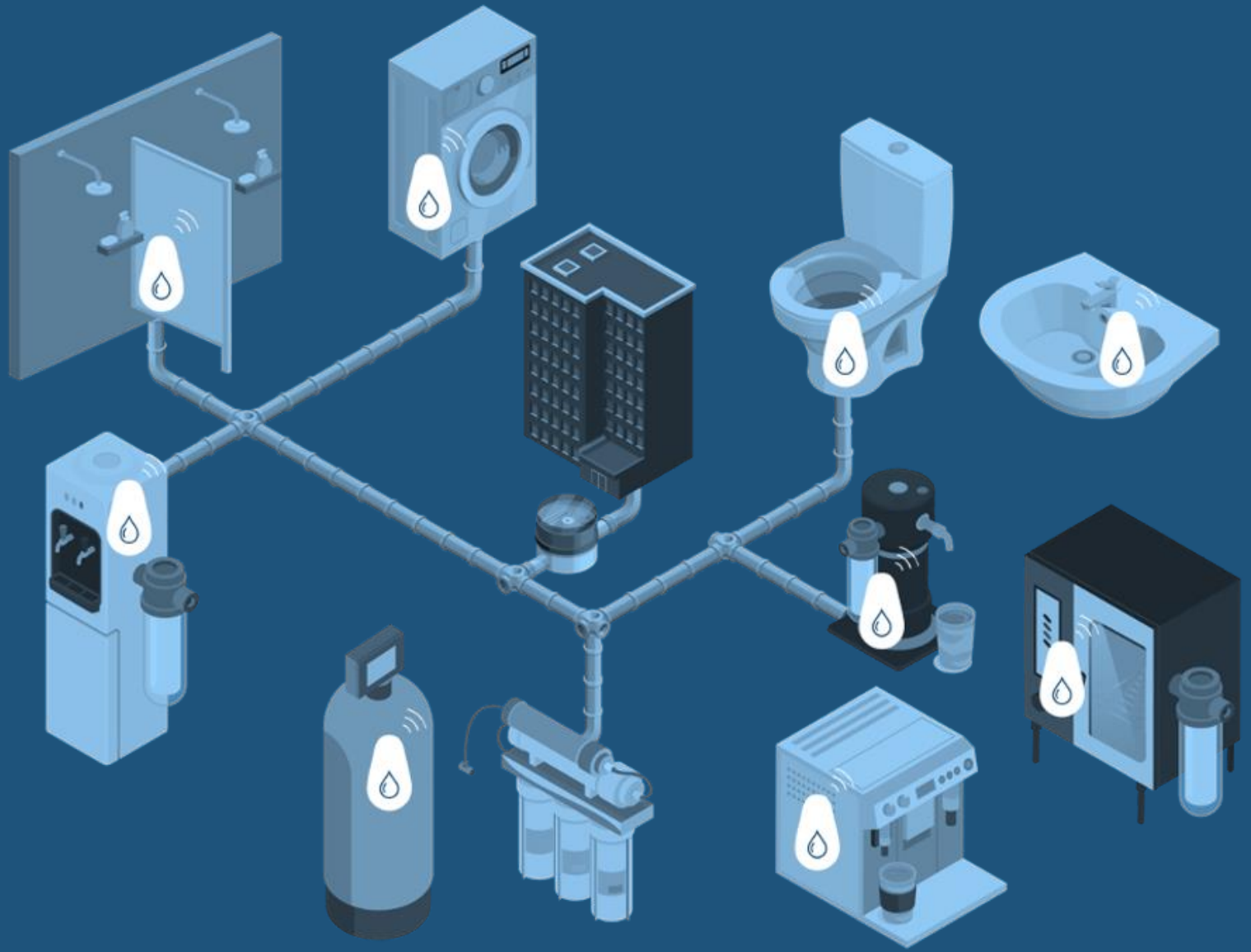
WATER COMPANY
OF THE YEAR 2020

GLOBAL WATER AWARDS

droople

# H2O INNOVATION X DROOPLE

# DROOPLE CONNECTS YOUR WATER ASSETS OFF RADAR TODAY



Founded in 2018

15 drooplets

Switzerland

80+ customers

SWISS MADE

# DROOPLE WATER INTELLIGENCE PLATFORM

# EASY INSTALL

## PLUG & PLAY IN 15 MINUTES

❶ **FIT INLINE** ON ASSET'S PIPING

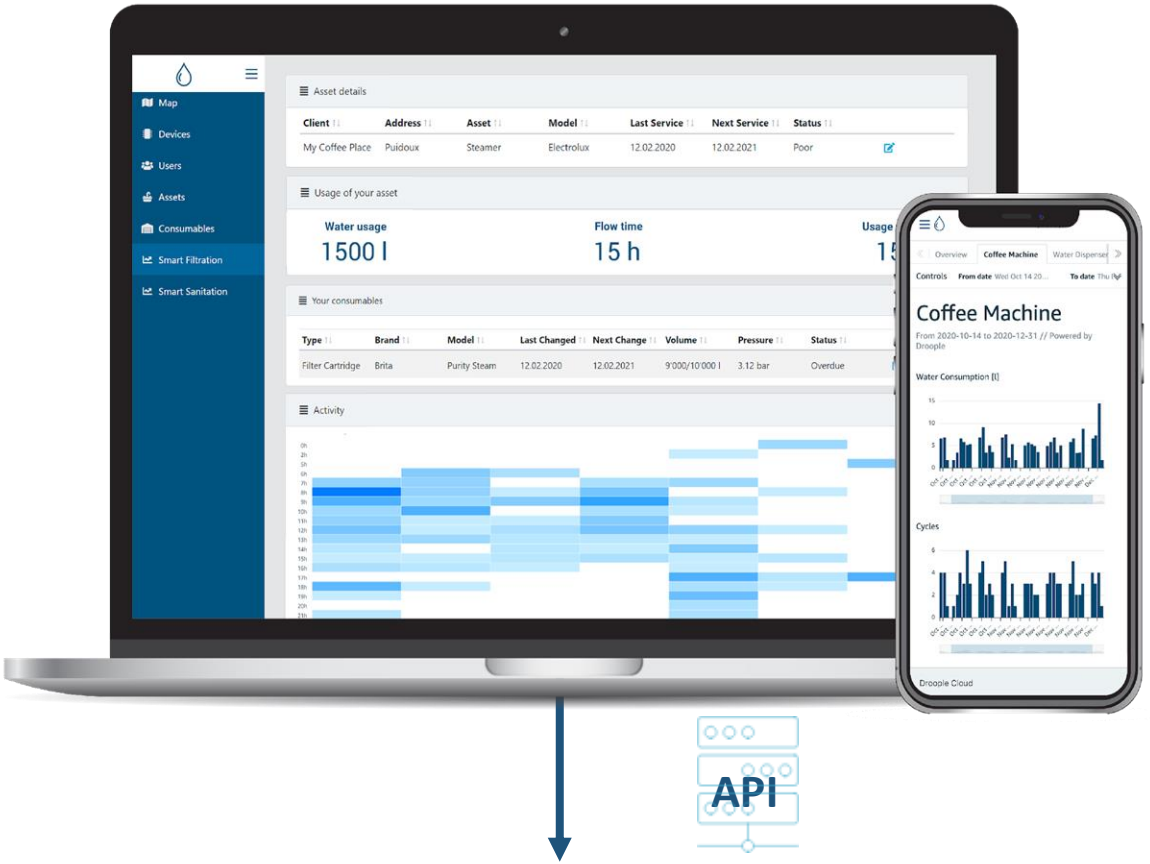
❷ **SCAN** QR CODE

❸ **ACTIVATE** YOUR ACCOUNT

You Tube

# EASY INTEGRATION

## TO PLATFORM OF YOUR CHOICE

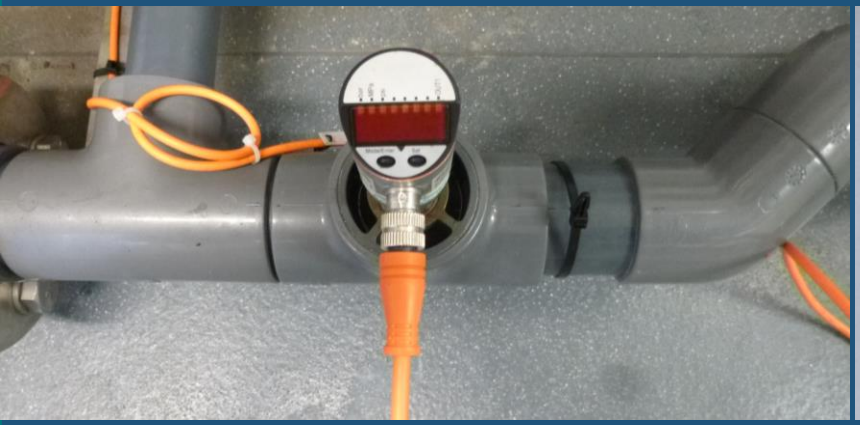


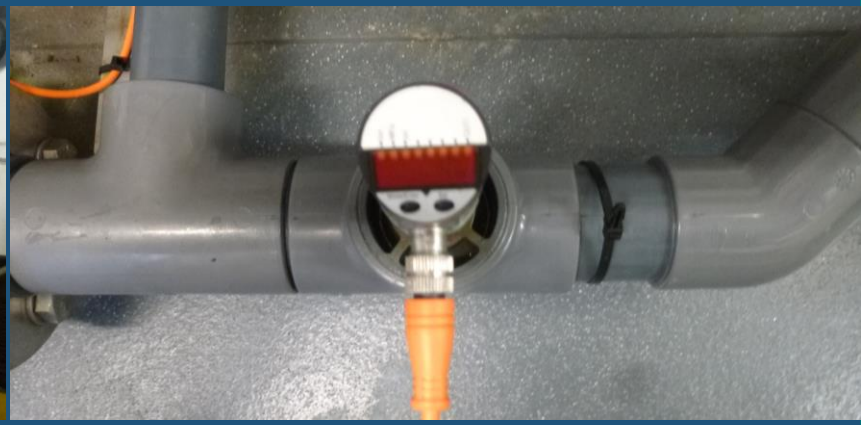

API

**ANY OTHER PLATFORM**

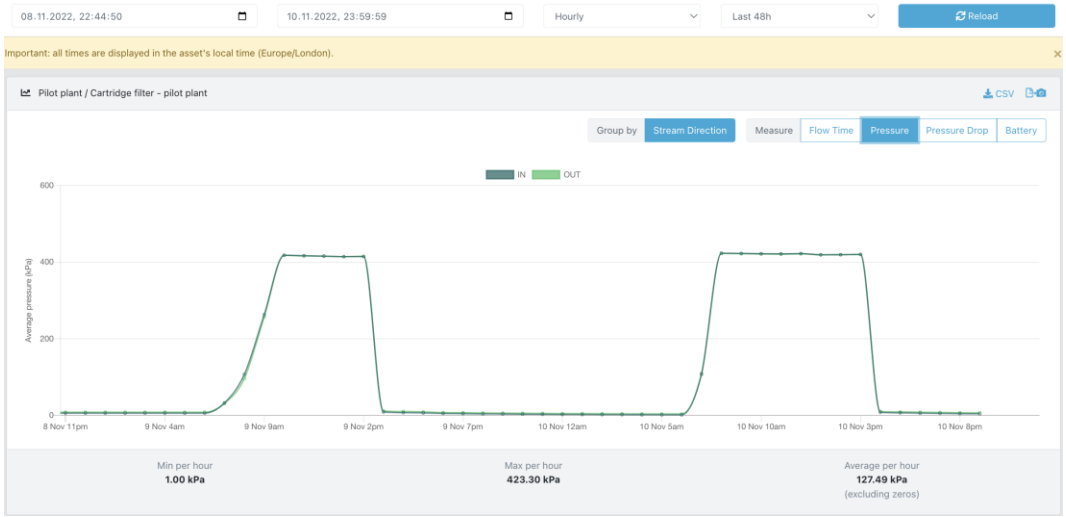
# 1 INSTALLATION

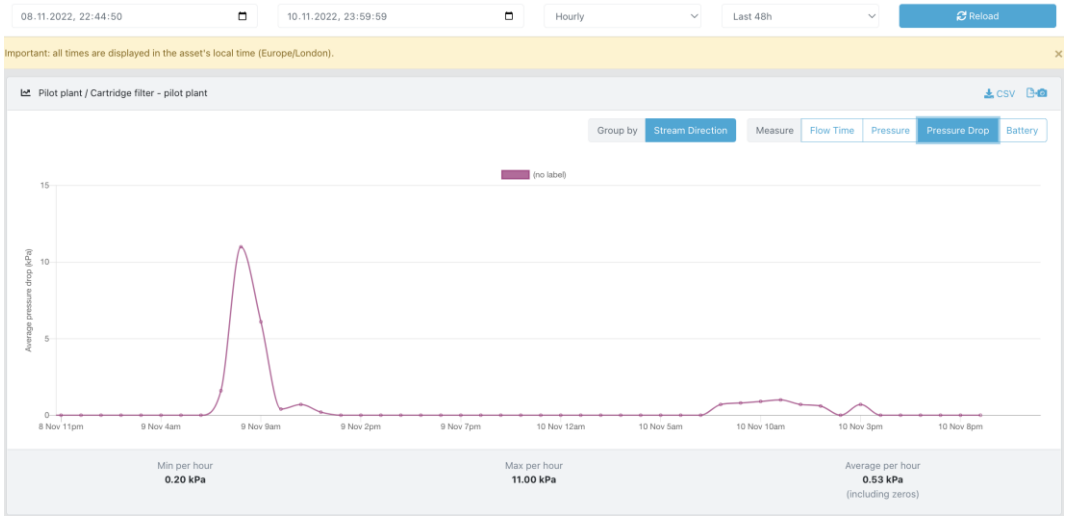
# PICTURES





# Monitor & Visualize the data : IN vs OUT or Pressure Drop




Your consumables

CSV

Search

1 consumables found

Add a new consumable

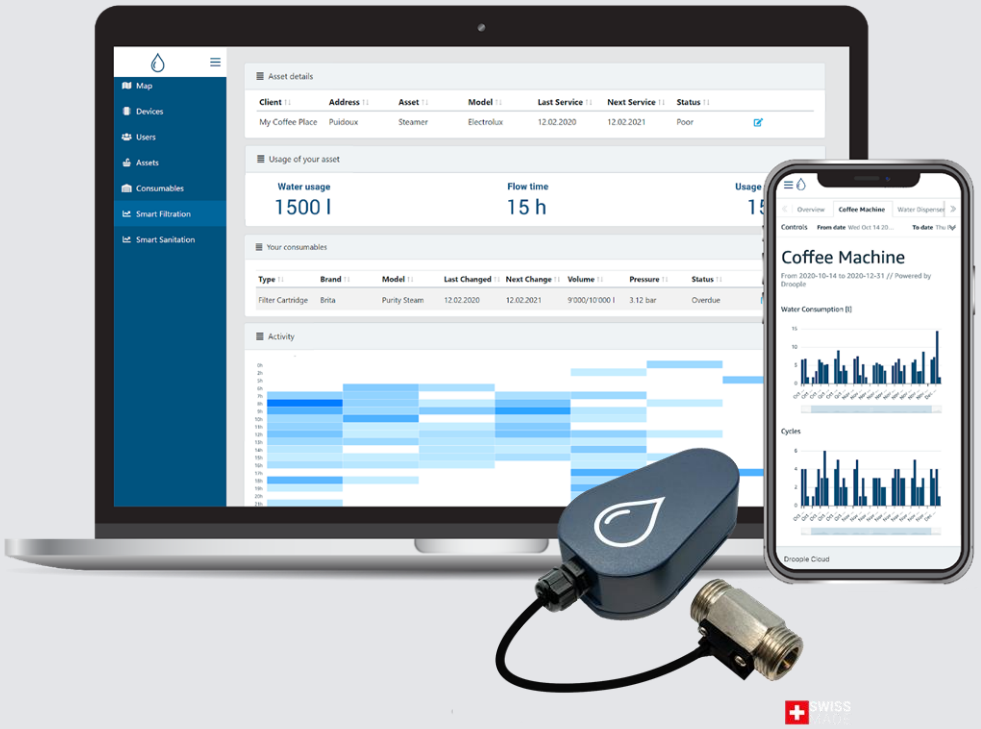
| ID | Name | Type | Installation | Expiry | Flow Quantity | Pressure | Flow Time | Predicted Capacity Overflow | Cycles | Age | Last Activity | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 562 | Cartidge filter | Filter | Nov 7, 2022 | Nov 7, 2023 | 0 liters | 2.5/300 kPa | 0 hours | N/A | 0 cycles | 0/12 months | N/A | Actions |

# DROOPLE WATER INTELLIGENCE PLATFORM

# ACCELERATE YOUR OPERATIONS WITH DATA

&

# SAVE WATER & ENERGY




- MEASURE IN REAL TIME
- EXPLOIT DATA & DECIDE
- GET NOTIFIED INSTANTLY

# DROOPLE iLINK© CONNECTS A WIDE RANGE OF WATER SENSORS AND **MAKE THEM SMART**

## Sensor Agnostic

**Water | Gas | Flow | Pressure | TDS | Other on request**

Flow
& T°

Pressure
water & gas

Flow & T°
& TDS
End of Q2

Water Quality sensor
EC | pH | Temp | ORP

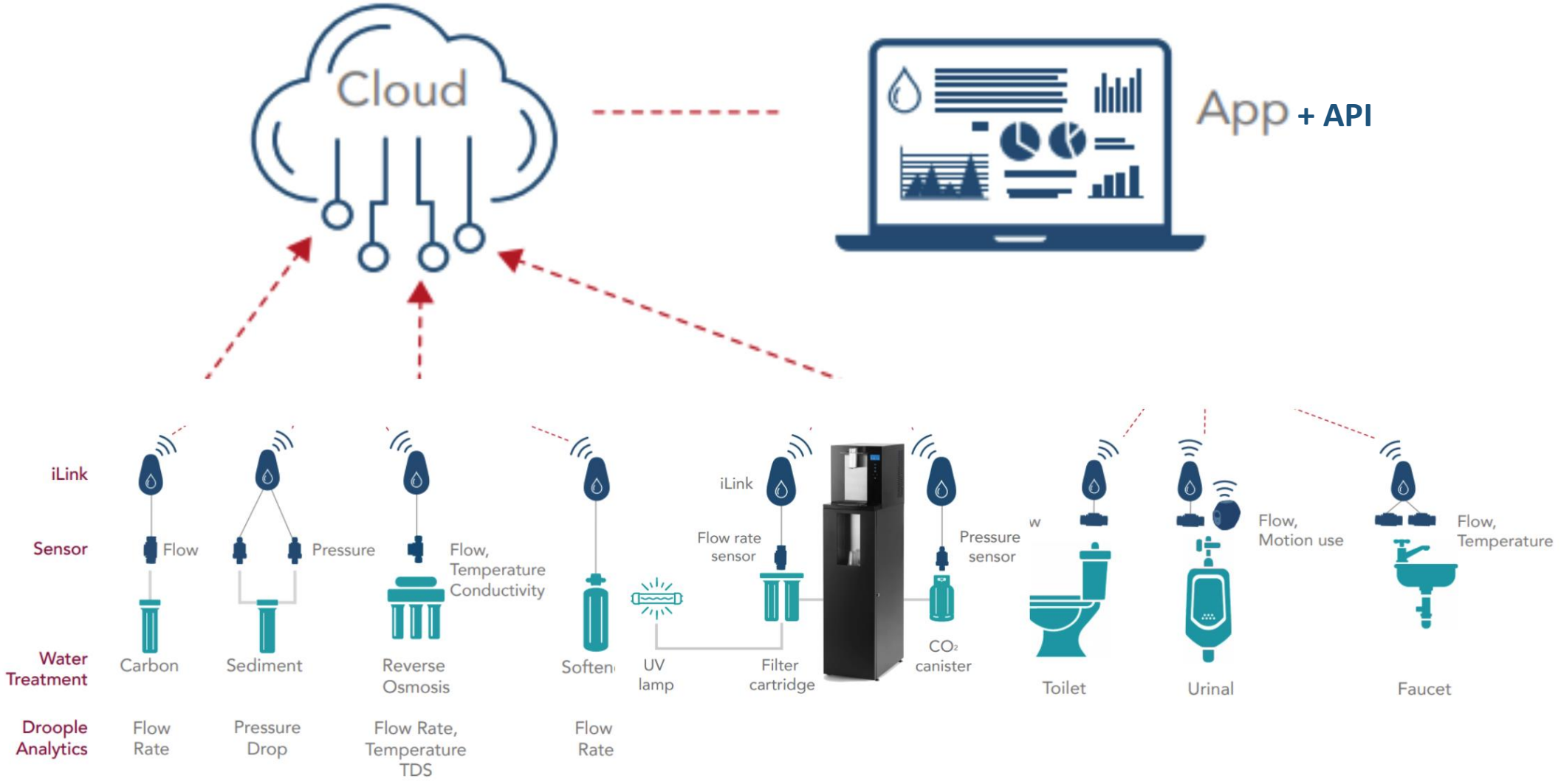
## Ultra-low Power

one 3.6V battery only for up to **5-10 years reducing the TCO of our solutions**

**Embedded Intelligence** sends pre-processed data to droople's Platform

LoRaWAN battery operated edge device capable of versatility based on analog/digital reading of sensors. Energy management with ultra-low power grade. Multi-frequency band modulation (US; EU, AS) and edge processing (converting raw sensor data to pre-processed consumption, cycle, delta, variance, etc.). Can connect up-to 4 sensors (2 pressure IN & OUT + 2 TRIO sensor for conductivity delta)

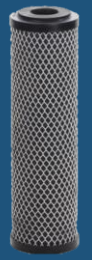
# ONE ILINK TO RULE THEM ALL



# FiltrationOS

Softener

Sediment



Carbon

Reverse Osmosis

## Solutions

4G | Ethernet | Wi-Fi

Flow Retrofit | Mono

Pressure Drop | Twin

Flow | Mono

Flow-Temp-Cond. | Mono

## Benefits

- Plug & Play
- Monitor overall water usage
- Refill & Resale consumables
- Planned maintenance

- Identify PoU water patterns thanks to PoE water data with our AI platform

- Plug & Play
- Ensure consistent water quality
- Monitor the clogged filter
- Resale cartridges

- Plug & Play
- Ensure appliance lifetime protection
- Prevent filter overdue
- Resale cartridges

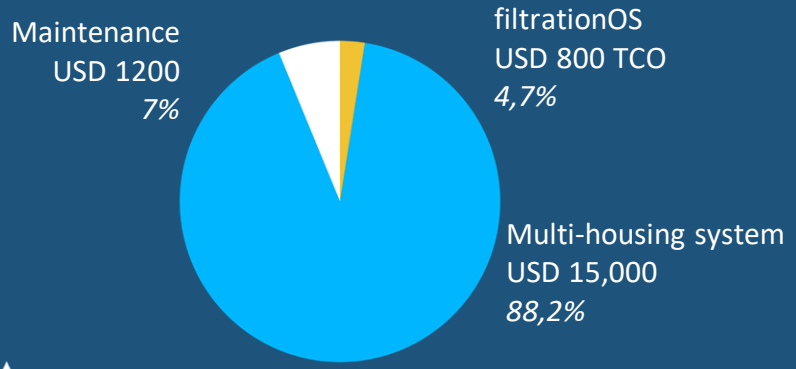
- Plug & Play
- Ensure consistent water quality
- Predict membrane overdue
- Resale cartridges

- Build the first granular map of water hardness thanks to PoU data for a better service and configuration

# CASE STUDY | ULTRA-FINE FILTRATION

PROJECT: Moving from manual to digital multi-housing ultra-fine filtration management in the light industry.

Fileder Filter Systems provides filters for ultra-fine filtration for a wide range of processes in light industry, life sciences, food & beverage and . However, monitoring the actual performance of customer filtration systems often involves in-person manual pressure measurements, which becomes a major task when servicing a largely distributed fleet.




RESULTS:

- ✓ better uptime
- ✓ consistent water quality over the time
- ✓ automated consumable replenishment
- ✓ Less unplanned maintenance

# CARWASH **PREDICTIVE MAINTENANCE FOR FILTRATION SYSTEMS**

## PAIN

Pre-filter changed every three days

Maintenance internalized

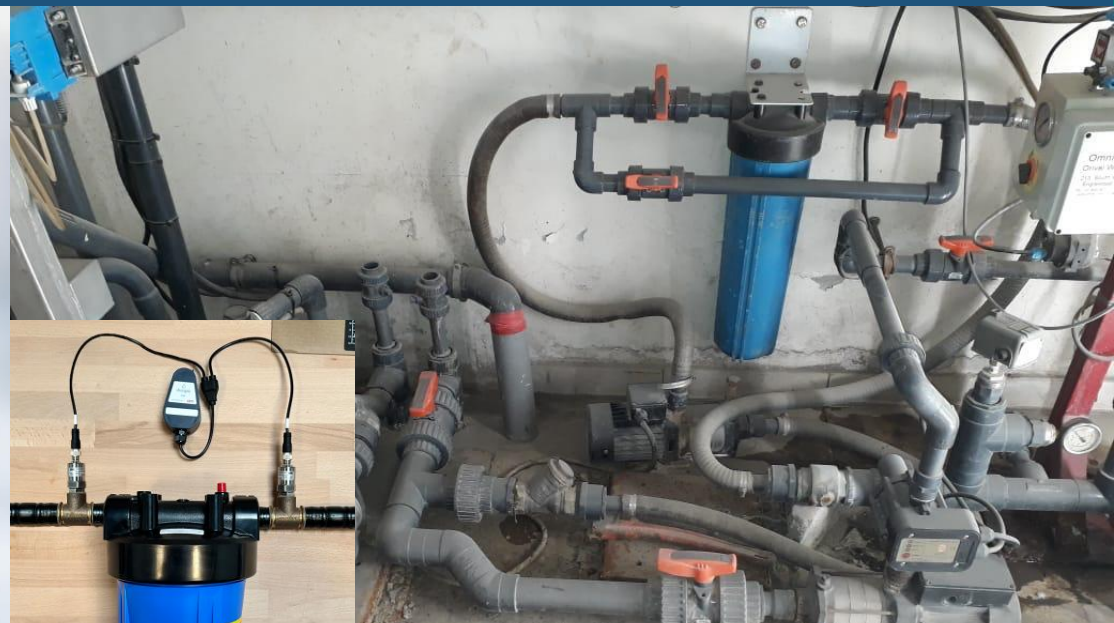
Inefficient filter for oil & sediment

## SOLUTION

Best suited quality filtration system for turbidity

Easy system with no backwash

With latest monitoring technology



# Droople price list January 2022

## CHOOSE YOUR PACKAGE

| | One-off purchase | Monthly or Yearly License | |
|---|---|---|---|
| | HARDWARE | SOFTWARE / DATA | |
| Flow sensor CARBON | EUR 90 | EUR 4 [/month] | EUR 45 [/year] |
| Retro-fit sensor SOFTENER | EUR 90 | EUR 4 [/month] | EUR 45 [/year] |
| Pressure sensor ULTRA-FINE | EUR 165 | EUR 4 [/month] | EUR 45 [/year] |
| Gateway Hub Wi-Fi | EUR 85 | included | Included |
| Gateway Hub 4G | EUR 185 | + EUR 2 [/month] | + EUR 24 [/year] |
| API Platform Integration | Included | | |

One Hub connects to 50 sensors within a geographical range. If multiple assets are in the same area: equip only one asset with the above package and equip all other assets with only sensor(s) starting at €80.

## VOLUME-BASED DISCOUNTS

SOFTWARE – based on active sensors on the platform :

❖Receive discounts based on over 20, 100, 300 and 1000 active assets

HARDWARE – based on volume order :

❖Request prices for orders over 20, 100, 300 and 1000 units

Note : All prices indicative and subject to change. Only formal quote/proposal from Droople with General Terms & Conditions of Sale shall be regarded as legally binding.

©2021 Droople SA – Confidential – Internal purpose only

# JOIN US TO PRESERVE WATER - OUR SHARED SOURCE OF LIFE!

Ramzi Bouzerda, CEO
ramzi@droople.com
+41 79 505 7876
www.droople.com