

# Floating layer detection and level measurement

## SENSOSTREAM - THE INTELLIGENT MODULAR SYSTEM

The **SensoStream** is the next level of monitoring and optimization up to automatic plant control.

The modular system allows (depending on the selected components) an exact speed measurement, floating layer detection, level measurement and viscosity measurement.

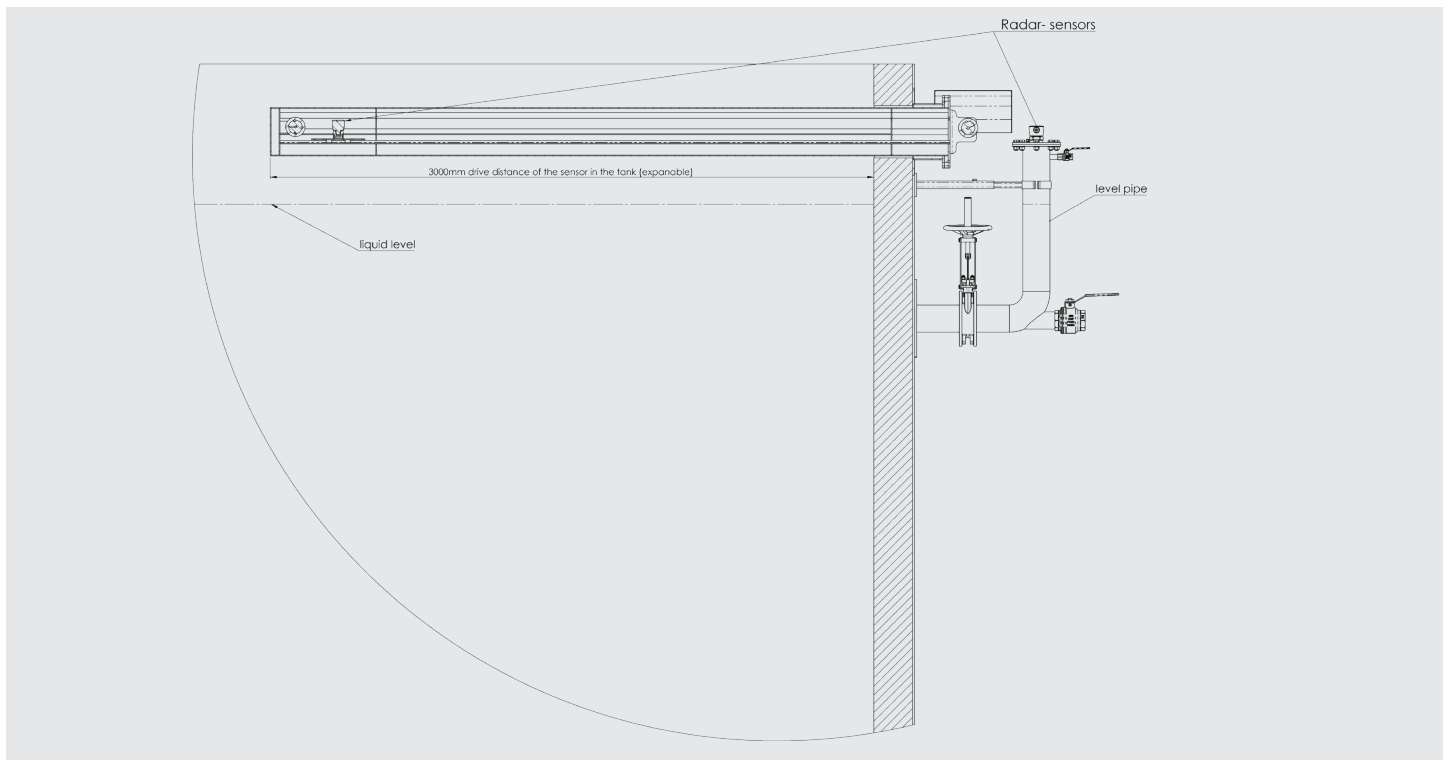
The **SensoStream** enables optimization of the entire biogas plant. Potential energy savings are exploited and the gas yield is maximized. The real-time measurements allow faults to be detected at an early stage so that they can be avoided as best as possible.



## MODULAR COMPONENT FLOATING LAYER DETECTION AND LEVEL MEASUREMENT

Floating layers in biogas plants reduce biogas from rising out of the substrate. Floating layer sensors can detect the formation of a floating layer in good time and thus prevent it. When a floating layer is detected, the **SensoStream** issues a warning signal so that the agitators can counteract the floating layer directly.

The sensors of the **SensoStream** measure the filling level in the tank in real time.



## Dimensions and connection to the tank

<b>Inner measuring system:</b>	1-3m standard 250mm pipe diameter wall panel 450x400mm NBR seal on flange
<b>Outer measuring system:</b>	wall panel 400x400mm 5-inch compensating pipe 90° elbow upwards valve
<b>Core hole size above:</b>	300mm diameter
<b>Position above:</b>	450mm above planned filling level
<b>Core hole size below:</b>	200mm diameter
<b>Position below:</b>	1200mm below planned filling level

## Sensor

<b>Measuring principle:</b>	Radar
<b>DC supply:</b>	24VDC
<b>Output signal:</b>	4-20mA
<b>Process temperature:</b>	-40°C to +80°C
<b>Waterproof:</b>	IP 66/68
<b>Connection:</b>	Bluetooth 5.0 enabled

## Evaluation unit

<b>Max. power consumption:</b>	5W
<b>Input:</b>	signals of sensors
<b>Evaluation:</b>	setting
<b>Signal:</b>	4-20mA an SPS
<b>Relay output:</b>	3, configurable
<b>Temperature outside:</b>	-40°C to +60°C
<b>Connection:</b>	Bluetooth 5.0 enabled