



# *SASensor*<sup>®</sup> H MV Primary Substation Automation

***SASensor***<sup>®</sup>

# Today's electric networks require visionary substation automation solutions

The world and our environment are changing. The global consciousness about the climate change, the future depletion of fossil energy and the global population growth will lead to two prominent contradictory effects: Energy demands will rise and (intermittent) generation of renewable energy will increase. Therefore today's electric networks should be prepared, for the already started energy transition, in a way that reliability, affordability and sustainability should be improved and ensured.

Are you satisfied with the **reliability** and **availability** of your network?

How to keep your processes **manageable** and **affordable**?

What is needed for **sustainability** in your grid?

## Balance the forces:



### Get your grid ready!

We have analyzed commonly applied secondary technology and recognized that the digitalization of the grid needs a new architecture to provide the optimal solution for the challenges of the energy transition. Be a leader in this transition, step into the world of *SASensor*, and get your grid ready.

## Manageability of the grid



### Start today!

The *SASensor* platform is an open and complete solution and provides all necessary functionality to digitalize the substations in your grid. *SASensor* will allow you to make fact-based decisions for grid planning and investments, to improve the quality of power supply and to improve process efficiency. Only just smarter...

## Vision on substation automation!

**SASensor**®





# SASensor<sup>®</sup> architecture: what you need today, tomorrow and beyond...

The uniqueness of the SASensor system architecture is the separation between physical devices (hardware) and functionality (software) on the one hand and fast ageing components (computers) and the long unalterable interface with the primary process (process interface modules) on the other hand.

This double separation within the system architecture makes it possible to adapt SASensor's installations to the ever-increasing demands of the grid, simply by software upgrades and/or computer performance improvements. The value of your present investment is guaranteed for decades.

SASensor is compatible with any primary substation equipment. In this way your present grid will be made intelligent without redoing the total installation.

The separation between hardware and software effectively solves the lifetime issues of digital equipment. Our interface modules, which are to be installed as close as possible to the primary equipment, can remain there for decades (at least 30 years), which minimizes future installation and maintenance costs. Software can be simply updated and Control units can be easily replaced in case they have reached the end of life. The investment reductions are significant.

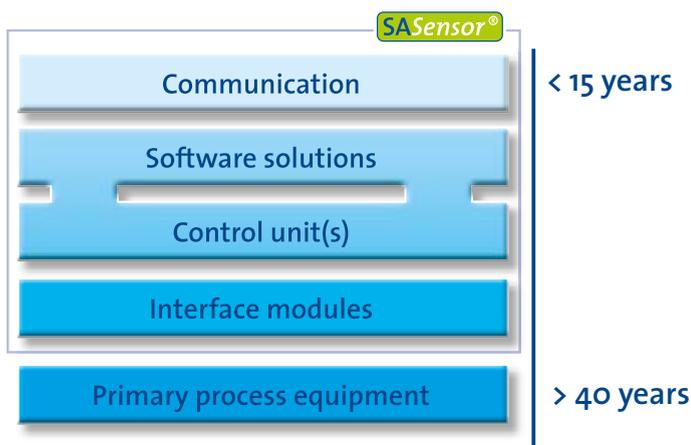
## Increased reliability

Highly accurate data processing and analyses provide better grid insight and give you the tools to localize faults, improve the mean time to repair, take measures to improve power quality or simply take the right decisions about maintenance and future grid planning investments.

SASensor improves your performance and increases your quality of supply.

## Increased affordability

As more and more skilled employees are facing retirement it is necessary to choose highly efficient solutions. Installation, commissioning (set-up) and maintenance are highly simplified by using the clever designed SASensor architecture. Configuration and maintenance of settings can be done easily with a few mouse-clicks (remotely or on-site). The clever designed architecture provides significant improvements of efficiency. With the future developments it will be necessary to do more work with less employees. SASensor constitutes a reference to realize that.



Expected life span

## Increased sustainability

There is no doubt that SASensor contributes to a sustainable society. Whether it concerns the long lifetime of SASensor components, accurate fault-place-location or determination of the right grid-investment decisions, SASensor provides all necessary information to distribute energy to the society in combination with a minimum of efforts. SASensor enables a monitored and reliable in feed of renewables.

## SASensor, a proven track record

SASensor is operational in tens of primary substations of the largest DNO in the Netherlands. Now, a complete rollout throughout all their hundreds primary substations with thousands of bays has started.

**Therefore we dare to state that SASensor is the perfect substation automation solution, ready to face future demands.**

**Get your grid ready, start today!**



# *SASensor*<sup>®</sup> a complete solution that offers you:

## Protection

The most common power system protection functions are available in *SASensor*. Directional overcurrent and earth fault protection, as well as breaker failure protection are standard. Disturbance recording of sampled data or half cycle rms ensures better process diagnostics and contribute to increased process efficiency which will lead to significant reliability and sustainability improvements.

## Local and remote control

Open technology of the web based user interface ensures a user-friendly perception of the system. Remote control is normally performed by using standard remote control protocols, like IEC60870-5-101/104 or DNP3. Via our secure SAVPN, *SASensor* can be managed remotely via all common WAN technologies. Maintenance engineers are able to manage and set-up the system locally and remotely.

## Alarm and event handling

Substation event and alarm handling is an integral part of *SASensor*. Disk storage enables post mortem analysis and system performance insight.

## Power quality monitoring

Constant power quality monitoring enables you to retrieve a full insight in the characteristics of your grid and to take the adequate measures for optimizing grid performance.

## Measurements

Three-phase measurements on each bay give you an online view on all current, voltage and energy characteristics.

## Self-diagnostics

*SASensor* constantly monitors itself with a system health check. As soon as exceptions are diagnosed, you will be informed immediately.

## Always up to date

New future functionalities can be developed, implemented and upgraded quite simple and easy by remote software updates. Your grid is always up-to-date without major maintenance or installation efforts; a real contribution to efficiency, sustainability and flexibility!

## Voltage control by on-load tap changer

The tap changer of the transformer is controlled to regulate the voltage automatically to improve quality of supply.

## Communication

*SASensor* supports a variety of communication protocols to be able to connect with remote control centers, other vendor's devices, etc. Flexibility and sustainability is guaranteed.



## Locamation

Locamation recognized that the present environmental developments (Europe 2020, distributed generation, electric vehicles, increasing energy demand, ageing network technology, retiring technical engineers) create several future challenges for grid operators. Within this background Locamation develops innovative substation automation solutions, ready to face future demands.

For the latest product information visit:  
[www.locamation.com](http://www.locamation.com)

## Interested?

Contact us for more information. We are pleased to inform you about *SASensor* and prove all advantages for you in a pilot installation. Install *SASensor* 'piggy-back' to a current installation and experience all features and advantages without any risk.



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