

## AMI Silitrace Ultra

*“Lowest detection limit, Highest reproducibility  
Continuous on-line determination of trace silica 5 ppt ”*

The AMI Silitrace Ultra is a unique solution that embodies continuous reproducibility with ultra-high accuracy for the on-line monitoring of trace silica in ultra-pure water (UPW). This system ensures the facility is producing quality UPW.

### Main features:

- Extended measuring range:  
0,005 ppb [5ppt] to 25 ppb
- Continuous on-line reproducibility:  
 $\pm 0.005$  ppb or  $\pm 5\%$  of reading
- Continuous self-monitoring of main instrument diagnostics such as:  
sample flow, reagent supply and measurement functionality.
- High quality precision photometer with temperature controlled reaction chamber.
- Innovative design for easy access for maintenance and operation.
- UPW concentrator which is a reverse osmosis system created by SWAN in partnership with Intel Corporation.



AMI Silitrace Ultra  
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Trace silica analyzer in the ppt range



# Trace silica analyzer in the ppt range

The innovative design of the AMI Silitrace Ultra provides highest accuracy, reproducibility and reliability. Its features include a wide set of instrument vitals, continuously monitored to ensure reliable and accurate online analysis of trace amounts of silica.



Made in Switzerland



## Faster Return on Investment:

How much do your production rejects cost every year? In the semiconducting industry, very small particles are lethal enemies capable of destroying entire wafers of chips. Therefore, being able to better monitor the real contamination levels in UPW is essential to reduce the amount of defective units and thus lowering production reject costs. Lower costs mean higher profitability and therefore a faster return on investment.

## Extended measuring range:

**0.005 ppb [5 ppt] - 25 ppb**

We have extended the low level measuring range of our silica analyzer down to 5 ppt. This means that water quality can now be much more accurately monitored, which ensures the integrity of your UPW and product quality.

## Continuous on-line reproducibility:

**± 0.005 ppb [5 ppt] or ± 5% of reading**

The AMI Silitrace Ultra is uniquely capable of combining the accuracy of the extended measuring range with a continuous reproducibility in the on-line monitoring of silica concentration in ultra-pure water (UPW).

## Real time and gap free monitoring through SWAN "Plug Flow" system

Continuous flow reaction of sample and reagent allows for a 4-6 times faster measuring cycle time compared to batch measurements (2,5 min vs. 10-15 min). Additionally, gap free (historical) data can be accumulated and used for valuable trend analyses.

## High precision photometer with a temperature controlled reaction chamber

Every chemical reaction is temperature dependent and statistical analysis has shown that best results are obtained at a constant temperature. The AMI Silitrace Ultra is therefore equipped with a state of the art thermostatic controlled chamber to prevent false readings from ambient and sample temperature changes to ensure reaction process integrity.

## UPW concentrator created by SWAN in partnership with Intel Corporation

SWAN's AMI Silitrace Ultra uses the UPW concentrator technique; an evidence based method that boosts our on-line silica analyzer to continuously monitor up to the extended limits of real silica level measurements in UPW up to 40 times more accurate.

# swan

ANALYTICAL INSTRUMENTS