

S3A

Suspended solids settlement analyser

Clearer insight into sludge performance.



S3A shown with the optional stirrer.

MLSS

Suspended solids

SSL

Sludge settlement
level

SVI

Sludge volume index

Supernatant

clarity

Floating

sludge

Automated testing. Informed decisions.

S3A suspended solids settlement analyser - SVI

Automated testing for clearer insight into sludge performance.



S3A suspended solids settlement analyser.

Measured parameters

- Mixed liquor suspended solids (MLSS)
- Sludge settlement level (SSL)
- Sludge volume index (SVI)
- Indication of supernatant clarity
- Indication of floating sludge
- Optional stirred sludge volume index (SSVI)

Benefits

- 210 mL sample for simple handling
- Automatic results and unattended testing
- Stored results with time and date stamps
- Up to three site profiles
- On-instrument trend review
- Optional stirrer for SSVI testing

From sample to result

01

Prepare a 210 mL sample

02

Let S3A finish the test

03

Review the final result

Technical specifications

S3A suspended solids settlement analyser

Category	Parameter	Specification
Power supply	Input / output	100-240 V AC input; 9 V DC, 0.55 A output
Power consumption	With optional stirrer	2.5 W maximum
Operating conditions	Temperature	0-45°C, non-condensing
Measurement range	Suspended solids	50-6,500 mg/L; stated accuracy $\pm 10\%$ * Above 6,500 mg/L is indicated as INF
Displayed results	Parameters	MLSS: mg/L SVI: mL/g SSL: mL/L Supernatant clarity indication: mg/L Floating sludge: mm Optional SSVI: mL/g
Test timings	Measurement cycle	MLSS: approximately 10 seconds Settlement / SVI / SSVI: 30 minutes
Calibration	Site-specific sample	Known MLSS sample of 2,000-4,000 mg/L. Repeat after large changes in sludge characteristics.
Data storage	Site profiles and history	3 site profiles; up to 28 results per profile
Interface and display	Controls	Push buttons and backlit LCD
Data connectivity	Optional MODBUS RTU	RS-485, 2-wire; specify when ordering. Read: functions 03/04; write: 06 (slave ID only).
Application	Process	Activated sludge wastewater treatment
Installation	Location	Indoor use; safe area only

*Performance depends on site calibration and sample characteristics. Keep the analyser out of direct and reflected sunlight.

Automatic testing

Leave the analyser to complete the selected test.

Simple operation

Push-button controls with a clear backlit display.

Compact design

Fits into routine laboratory and process workflows.

More consistent results. Better-connected teams.



Make repeatable assessments and put recorded results to work.



Reduce subjectivity

Instrument-based MLSS, settlement and SVI / SSVI assessments can help teams compare results more consistently and see changes in sludge performance more clearly.

Retained results and trend review can support earlier investigation and preventative action alongside normal process checks.

Bring results into view

The optional MODBUS RTU connection lets a compatible client system poll supported S3A readings over RS-485 using read functions 03/04.

Client integration can bring readings from site-based units into a shared dashboard for review by site management and technical staff.

A route from test result to wider review

S3A result → RS-485 polling → Compatible client system

Dashboard and network integration are configured by the client.

MODBUS is optional and must be specified when ordering. Read functions 03/04 access supported data; write function 06 is limited to Holding Register 40001 (slave ID, 1-247). Confirm the required data and integration with PMA before specifying.