



Automatic Isokinetic Sampler ST5



The reliable automatic sampler every isokinetic Source Tester needs

Take the worry out of isokinetic sampling and eliminate the risk of human error in manual data entries and calculations.

Let's make your work easier and more accurate!

When paired with the Heated Probe HP5, Cold Probe CP5 and CP2, the ST5 stands out as the most advanced technical solution available on the market.

Meets and exceeds EN standards EN 16911-1, EN 15259, EN 13284, EN 1948-1, OTM 45

Compatible with US EPA Methods M2, M5 ed M17

Works with US EPA probes.

Everything is...

Color-coded thermocouple jacks: imagine never having to guess which wire goes where. These jacks make it a breeze to identify connections at a glance, saving you time and hassle.

Heating and recording for probe and filter holders: keep your system running at peak performance. By heating and recording temperatures, you ensure everything is operating smoothly and efficiently.

Automatic stop flow for water trap protection: no more worries about water intakes. This feature automatically stops the flow to protect your system, giving you peace of mind.

Easy accessible protection filter: maintenance made simple! Easily access and replace the protection filter to keep your system clean and running smoothly.

Condensing System Outlet Temperature Recording: precision is key. This feature allows you to monitor the outlet temperature accurately, ensuring your system is always in the optimal range.

Quicklock Connections for the Pitot Tube: say goodbye to setup errors. These connections are designed for a secure and foolproof setup every time.



...seamlessly within your control.

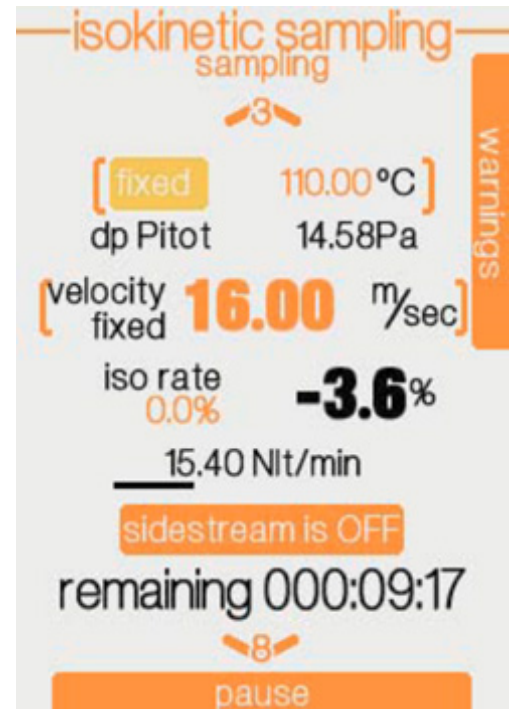
Realtime maintenance of isokinetic condition by orifice meter.

Thanks to the integrated orifice meter, the instrument continuously maintains isokinetic conditions through real-time adjustments, ensuring optimal performance and unmatched accuracy without the need for manual corrections.

The interface is designed for clarity and efficiency, with five color-coded menus organized by application.

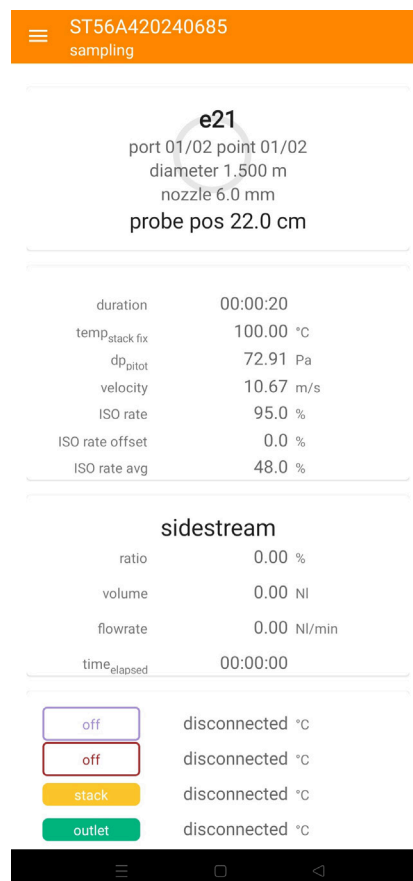
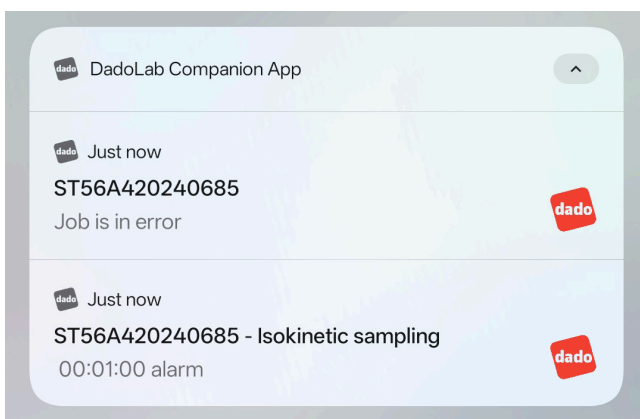
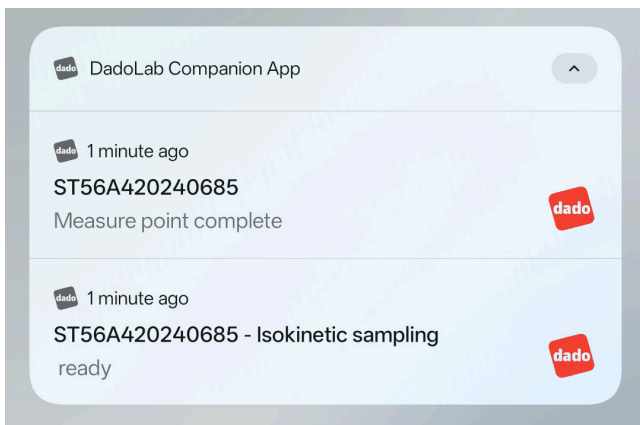
During sampling, only the most essential information is shown on screen, allowing you to stay focused on what truly matters.

Meanwhile, all other data is automatically recorded in detailed reports, giving you full traceability and easy access whenever needed.



Instant notifications via the Dadolab Companion APP.

Stay updated with real-time notifications on your mobile device, keeping you informed wherever you are.



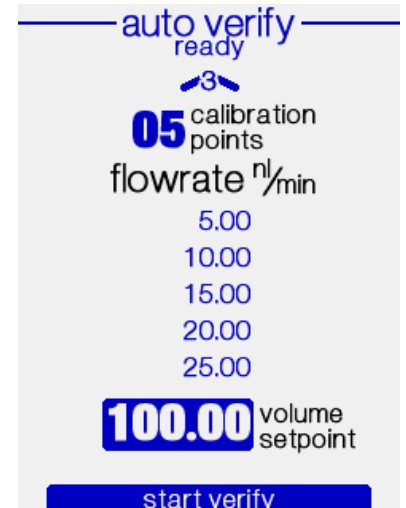
QR Code
to download the app

Or search Dadolab
on google play

Unlock the full potential of the ST5

With the Dadolab CF1 solution, you can wirelessly perform automatic system calibration and verification - maximizing convenience and efficiency.

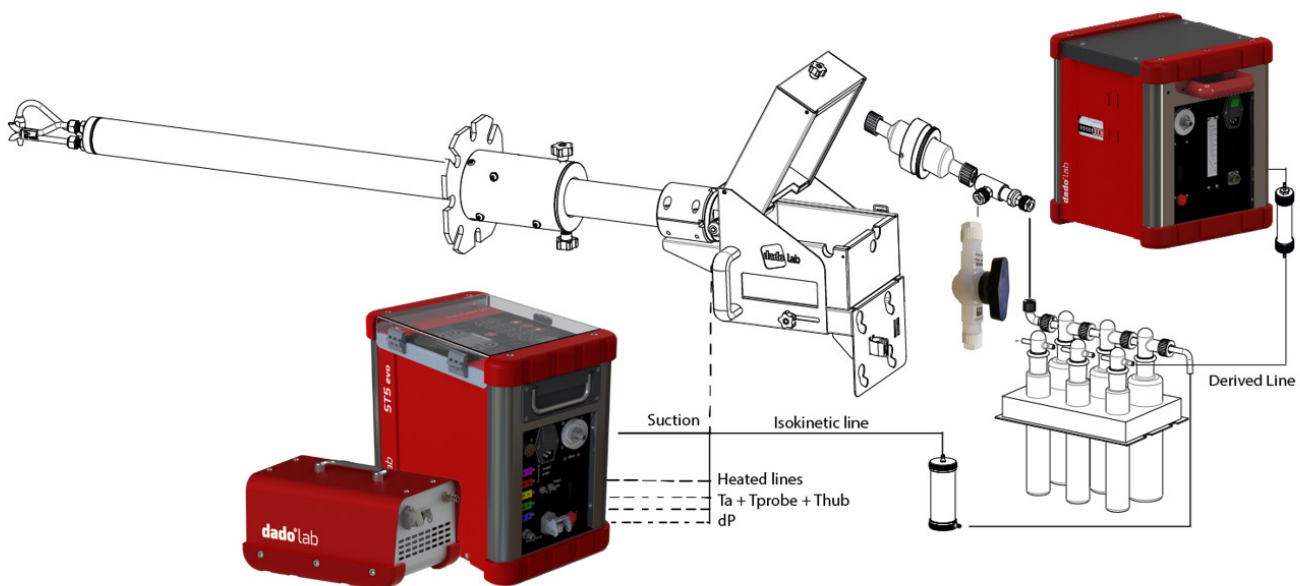
Say goodbye to complex setups, and enjoy full traceability of all calibration data.



Automatic Digital Sampler : revolutionize your side sampling process.

With the Dadolab ADS-1, maintaining a constant main-to-derived line flow ratio within $\pm 10\%$ [EN14385, section 5.1.2.6] will be Digital, Automatic and Continuous.

All derived line sampling data is automatically stored in the ST5 report, ensuring complete documentation. Zero efforts, maximum data traceability, Zero error allowed. When precision makes the difference.



Autozero pitot for precision and stability:

Achieve unparalleled accuracy with automatic zeroing, ensuring your measurements are always spot-on.

Complete traceability of data and calibration:

Track every detail with comprehensive traceability, ensuring all data and calibration records are easily accessible.

Experience the future of sampling with these advanced features!

Built-in pitot and ducts libraries: access its library of pitot and duct configurations, making setup and adjustments quick and easy.

No software needed for LIMS interfacing: simplify your workflow with direct interfacing to Laboratory Information Management Systems (LIMS) without the need for additional software.

Automatic validation of sampled volume every session: ensure accuracy with automatic validation of sampled volumes, giving you confidence in your data.



Lifetime guarantee of free updates:

enjoy peace of mind with free updates for life, keeping your system up-to-date with the latest advancements.

ALL-IN-ONE or EVO Configuration: Choose the setup that best fits your needs - from the fully integrated ALL-IN-ONE solution to the flexible EVO version with an external pump option.

The pump features a carbon nitride anti-corrosion treatment and is managed via inverter technology, ensuring maximum operational flexibility.

It's designed to meet a wide range of requirements, whether compensating for different pressure drops or achieving various flow rates.



Part Number and accessories

ST5 Isokinetic Sampler: delivered with rugged Pellican case, USB Flash disk, Test reports, Power cable

101 101 1001	Isokinetic Sampler ST5 V4.5 w/ comm activation
101 101 1002	Isokinetic Sampler ST5 V8.5 w/ comm activation
101 101 1011	Isokinetic Sampler ST5 V4.5 110V w/ comm activation
101 101 1012	Isokinetic Sampler ST5 V8.5 110V w/ comm activation

ST5 EVO Isokinetic Sampler: : delivered with rugged Pellican case, USB Flash disk, Test reports, Power cable

101 101 1100	Isokinetic Sampler ST5 Evo Control Unit w/ comm activation
101 101 1104	Isokinetic Sampler ST5 Evo Control Unit 110V w/ comm activation

101 101 1101	ST5 Evo V4.5 Pump Unit Corrosion-proof
101 101 1102	ST5 Evo V8.5 Pump Unit Corrosion-proof

101 101 4100	Connection cable CU-PU ST5 Evo L=5m
101 101 4110	Connection cable CU-PU ST5 Evo L=10m
101 101 4120	Connection cable CU-PU ST5 Evo L=15m
101 101 4130	Connection cable CU-PU ST5 Evo L=20m
101 101 4140	Connection cable CU-PU ST5 Evo L=25m
101 101 4150	Connection cable CU-PU ST5 Evo L=30m

Accessories and spare parts

101 101 2001	Zero dP Option
101 101 3010	Inlet gas protection filter, box of 10 pcs
101 110 4003	Silica gel/Charcoal trap 1 lt

Automatic Derived Sampler ADS-1

101 101 1200	Automatic Derived Sampler ADS-1
101 101 1203	ST5 connection interface for ADS-1

101 110 4002	Silica gel/Charcoal trap 100cc
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CF1: Digital Flow Calibrator

300 104 1101	CF1 Digital Flow calibrator 0,4-45 l/min
300 104 1111	CF1-UR Digital Flow calibrator 0,4-45 l/min w/ rH/T probe

300 104 2001	CF1 High Accuracy calibration
300 104 2011	Damper for ST5 calibration with CF1

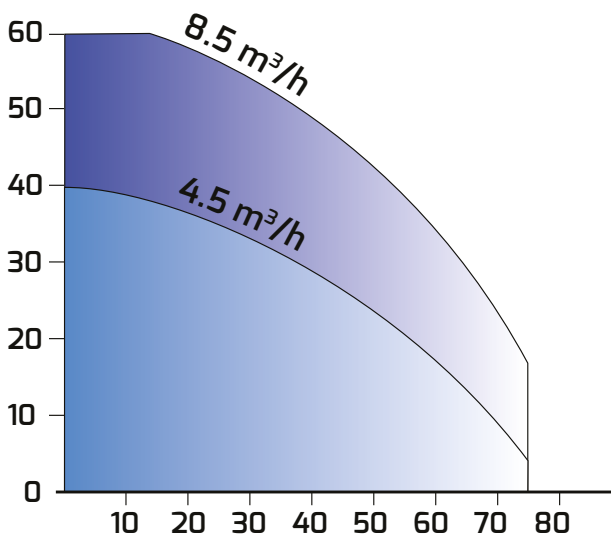
200 110 1031	ISO17025 Flowrate certification on 5pts
200 110 1001	ISO17025 DGM certification on 5 points
200 110 1023	ISO17025 Absolute pressure sensor certification on 5 pts
200 110 1061	ISO17025 Thermoigrometric CF1 probe certification on 3+3 points

HP5 Connection cable

101 101 2100	.....	Connection Cable HP5 w/ external suction tube L= 5m
101 101 2110	.....	Connection Cable HP5 w/ external suction tube L= 10m
101 101 2120	.....	Connection Cable HP5 w/ external suction tube L= 15m
101 101 2130	.....	Connection Cable HP5 w/ external suction tube L= 20m
101 101 2140	.....	Connection Cable HP5 w/ external suction tube L= 25m
101 101 2150	.....	Connection Cable HP5 w/ external suction tube L= 30m

CP5 Connection cable

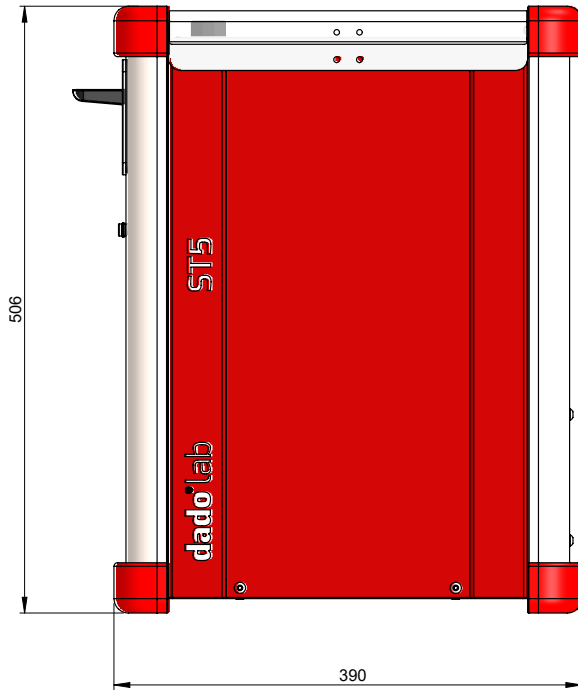
101 101 2200	.....	Connection cable CP5 w/ external suction tube L = 5m
101 101 2210	.....	Connection cable CP5 w/ external suction tube L = 10m
101 101 2220	.....	Connection cable CP5 w/ external suction tube L = 15m
101 101 2230	.....	Connection cable CP5 w/ external suction tube L = 20m
101 101 2240	.....	Connection cable CP5 w/ external suction tube L = 25m
101 101 2241	.....	Connection cable CP5 w/ external suction tube L = 30m



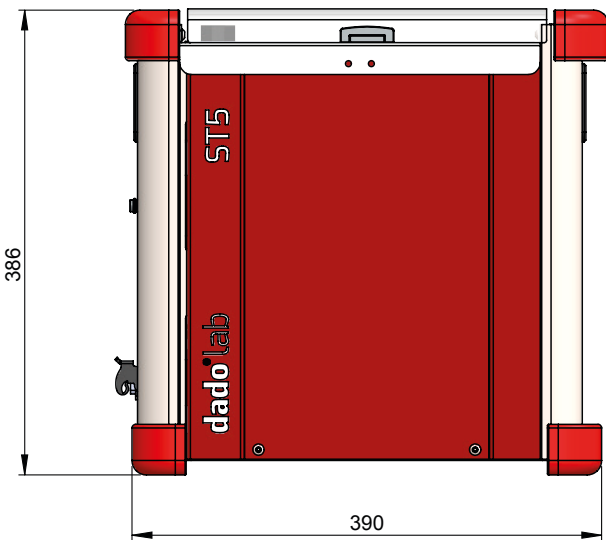
Technical Characteristics

Operating range	5 ÷ 60 l/min
Sampled Gas Condition	Dehumidified, max temperature 45°C
Gas inlet	With particulate and liquid protection filter
Connections	Quick couplings
Operating Conditions	-20 ÷ 45°C 95% UR
Storage conditions	-10 ÷ 50°C 95% UR
Display	3.5" Graphic LCD (QVGA)
Data port	USB 2.0, Bluetooth
Internal memory	16 GB
Power supply	230 Vac ±10% 50/60Hz
Materials	Structure composed of steel and aluminum
Keyboard	Polycarbonate, tactile effect keys
Dimensions	
ST5	390 x 264 x 506 mm
ST5 EVO CU	390 x 264 x 386 mm
ST5 EVO PU	227 x 329 x 191 mm
Weight	
ST5 pump 4.5 m³/h	22 Kg
ST5 pump 8.5 m³/h	24 Kg
ST5 EVO CU	13 Kg
ST5 EVO PU pump 4.5 m³/h	10 Kg
ST5 EVO PU pump 8.5 m³/h	11,5 Kg
Sensors	
Volume	
DGM	Class G2.5 EN 1359 compliant
Range	0.025 m³/h ÷ 4.0 m³/h
Accuracy	2% reading
Resolution	0.1 litri
Sampling flowrate	
Control type	Orifice mass flow meter, compliant with UNI EN ISO 5167-2
Range	5 ÷ 60 l/min
Resolution	0.01 l/min
Accuracy	± 1%
Pitot differential pressure	
Range	-100 ÷ 1000 Pa (-10 ÷ 100 mmH ₂ O)
Linearity and hysteresis (combined)	0.25 % FS
Accuracy	Better than 1% of measurement (± 2Pa)
Resolution	0.01 Pa (0.005 mmH ₂ O)
Maximum burst pressure	max. 3000 Pa (300 mmH ₂ O)
Absolute pressure (static-barometric)	
Range	10 ÷ 105 kPa (1050 mBar)
Linearity and hysteresis (combined)	0.25 % FS
Resolution	0.01 kPa (0.1 mBar)
Accuracy	Better than 1% of measurement (± 0.25 kPa)
Thermocouple input	
Range	-20 ÷ 1200 °C
Resolution	0.1 °C
Accuracy	1% reading ± 0.4 °C
DGM Temperature	
Range	-20 ÷ 100 °C
Resolution	0.1 °C
Accuracy	1% reading ± 0.2 °C

Dimensions (mm)



ST5



ST5 EVO

