ST5 LT: the essence of the ST5, in a lighter form.

The ST5 LT is the automatic isokinetic sampler specifically designed for emissions sampling with non-heated or self-heated probes.

It shares the same hardware and firmware platform as the standard ST5 model, with a few key differences: it lacks thermostat control, features a pneumatic circuit where the volumetric meter operates at ambient pressure, and can be powered by battery.

Despite its simplified configuration, the ST5 LT remains fully automatic and incorporates all isokinetic calculations, functions, and management features of the ST5.

This ensures high accuracy, making it a dependable alternative to more complex systems.

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.

dado lab

Battery-operated with auto-calibration

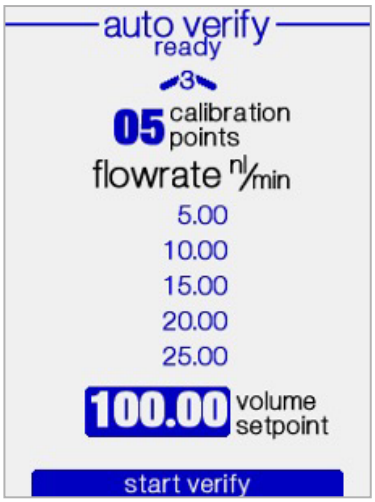
Thanks to its battery-powered operation and the integration of all sensors within the instrument body, the ST5 LT enables high-quality isokinetic sampling with maximum portability and ease of use.
The built-in libraries allow the sampler to be pre-programmed before each field mission.
Once on site, simply connect the stack thermocouple and the dP sensor: the instrument will manage the rest automatically.

The ST5 LT is available with two pump configurations: a 4 m³/h diaphragm pump or an 8 m³/h rotary pump, offering flexibility to meet various application requirements.

Combining advanced technology, high-quality components, and an affordable price, the ST5 LT stands out as the ideal solution for isokinetic particulate sampling in ducts and chimneys.

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.



Unlock the full potential of the ST5

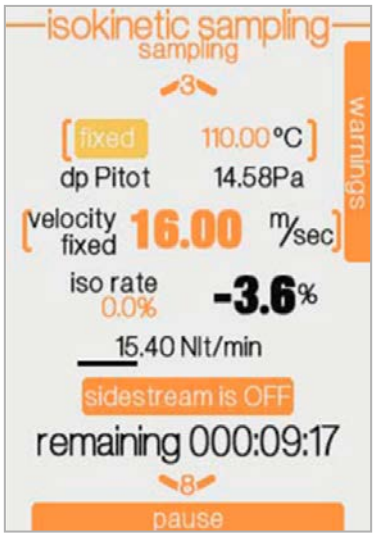
Realtime maintenance of isokinetic condition by orifice meter.

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.

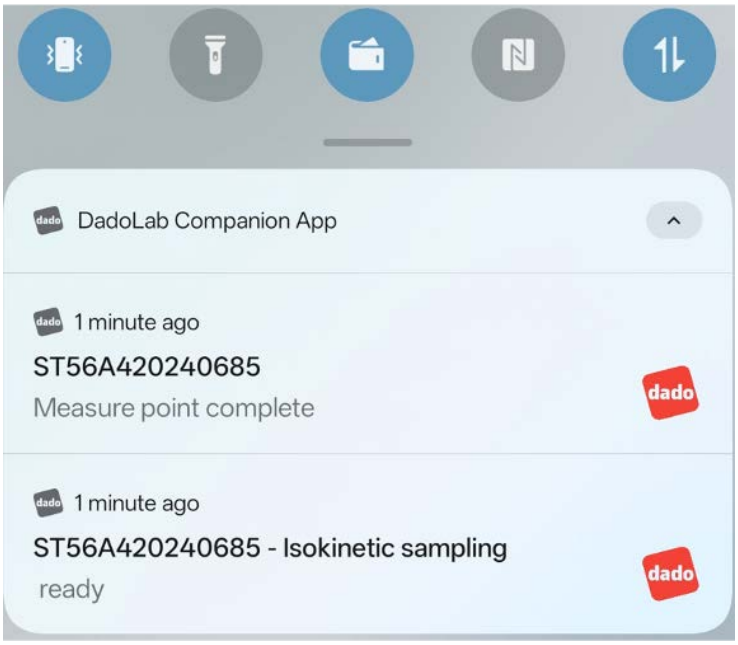
The interface is designed for clarity and efficiency, with five color-coded menus organized by application.

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 dowload the app
or search Dadolab on google play

Part Number and accessories

ST5 LT Isokinetic Sampler: delivered with USB Flash disk, Test reports, Power cable

101 101 1051 .....Isokinetic Sampler ST5 LT V4.5 w/ comm activation
101 101 1052 .....Isokinetic Sampler ST5 LT V8.5 w/ comm activation

101 101 1061 .....Isokinetic Sampler ST5 LT V4.5 110V w/ comm activation
101 101 1062 .....Isokinetic Sampler ST5 LT V8.5 110V w/ comm activation

Battery

102 105 2045 .....Interface for Lifepo4 battery
102 105 2049 .....LiFePO4 30Ah 24V battery for ST5 LT V4.5

Accessories

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

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

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

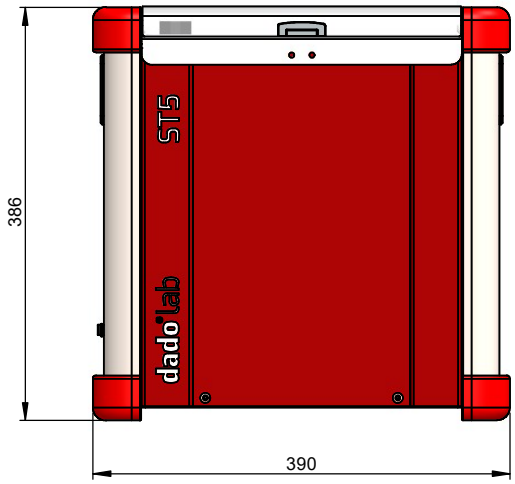
300 104 2001 .....CF1 High Accuracy calibration
300 104 2011 .....Damper for ST5 calibration with CF1

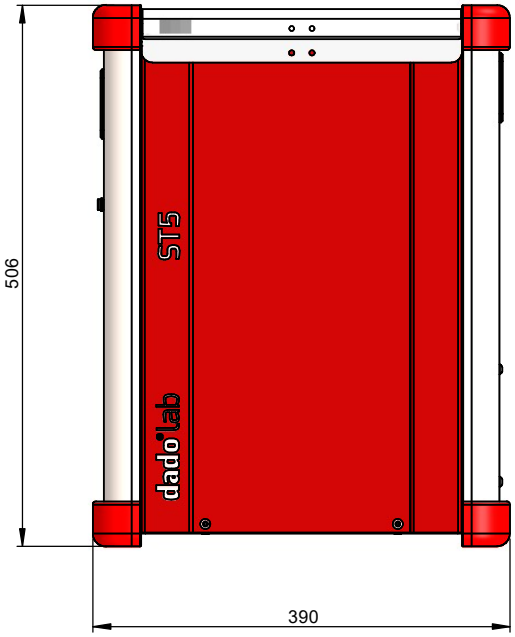
200 110 1031 .....ISO17025 Flowrate certification on 5pts
200 110 1001 .....ISO17025 DGM certification on 5 points
200 110 1023 .....ISO17025 Absolute pressure sensor certification on 5 pts
200 110 1061 .....ISO17025 Thermoigrometic CF1 probe certification on 3+3 points

Technical Characteristics

Operating range	5 ÷ 60 l/min
Sampled Gas Condition	Dehumidified, max temperature 45°C
Gas inlet	With particulate 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 LT 4.5	390 x 264 x 386 mm
ST5 LT 8.5	390 x 264 x 506 mm
Weight	
ST5 LT 4.5	15 Kg
ST5 LT 8.5	23,5 Kg
LiFePO4 30Ah 24V battery for ST5 LT V4.5	3 Kg
Sensors	
Volume	
DGM	Class G2.5 EN 1359 compliant
Range	0.025 m^3/h ÷ 4.0 m^3/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_2O)
Linearity and hysteresis (combined)	0.25 % FS
Accuracy	Better than 1% of measurement (± 2Pa)
Resolution	0.01 Pa (0.005 mmH_2O)
Maximum burst pressure	max. 3000 Pa (300 mmH_2O)
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)





Dado Lab S.r.l. a company of Sdiptech Group
Via Pellizza da Volpedo 101A, 20092 Cinisello B. (MI) - Italy
+39 02 36569420 info@dadolab.com www.dadolab.com