



ST2: Stack velocity and flowrate meter



ST2 is a battery-powered, compact solution designed to simplify fluid-dynamic assessments during gas velocity and flowrate measurements in industrial stacks and ducts.

Thanks to its wireless connectivity, the ST2 integrates seamlessly with the Dado Lab Companion App.

The operator is guided step-by-step through programming and measurement phases, minimizing the risk of error.

Real-time notifications are sent directly to the smartphone, which becomes a true portable control center, also capable of sending sampling reports directly to the laboratory.

ST2 can be mounted on any Pitot tube available on the market, thanks to a range of compatible adapters.

Its integrated digital inclinometer ensures automatic and precise detection of the swirl angle.

In addition to duct profiling, the ST2 can wirelessly connect to the QB1-z isokinetic sampler to perform sampling in full compliance with EN 13284:2017, ISO 9096:2017, and EPA Methods 5 and 17 standards.

ST2 – A powerhouse of exclusive technology for reliable, versatile, and cutting-edge measurements.

Although the ST2 is compatible with any Pitot tube and thermocouple on the market, it pairs seamlessly with the CP2 cold isokinetic probe.

A robust mounting system allows the instrument to be securely attached, freeing the operator.

Thanks to its integrated digital inclinometer, the ST2 ensures automatic and precise swirl angle detection, streamlining the entire measurement process.



The ST2 can also be equipped with an optional second differential pressure sensor, enabling simultaneous velocity measurements at both a fixed and a mobile point, an essential feature for field repeatability evaluations as required by EN 16911.

Additionally, the Zero dP function allows the differential pressure sensor to be zeroed while the unit is still connected to the Pitot tube and the probe is already positioned inside the stack, ensuring accurate calibration without interrupting the setup.

Say goodbye to outdated serial connections and the bulky cables that often double as interference magnets. In a world where everyone carries a smartphone, it's time to embrace innovation that enhances efficiency, eliminates errors, and ensures full traceability of data and calibration files. The ST2 empowers operators in the field, gives QA/QC managers complete oversight, and surprises procurement teams with its affordability- despite being a compact, state-of-the-art device.

App-Powered Control. Field-Proven Confidence.

In field operations, control and data integrity are critical. That's why the ST2 features advanced wireless connectivity and seamless integration with the free Dado Lab Companion App, transforming your smartphone into a powerful command center.

With just a few taps, users can program libraries, monitor real-time measurements and calculations, instantly download reports, and send data directly to the lab or office via email.

This smart connectivity doesn't just streamline workflows, it significantly reduces the risk of data loss and speeds up setup and reporting, even in the most demanding environments.

The ST2 isn't just connected. It's built for total control: anytime, anywhere.

ST2 [ST210120190013]

Measurement reports

dado

lab

Isokinetic Sampling

18/02/2025 12:59:37

POINT LIST

test	gas	probe	type	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	value	unit	val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ST2

ST211520240184
stack velocity and flowrate
v0.8.3002

Realtime data

Report

Disconnect

Utilities

Nozzle utility

Duct library

Show library

Create new duct

Pitot Library

Show Library

Create new pitot

Privacy and Credits

Credits

But ST2 is more than just a meter.

Dado Lab has combined experience and innovation to develop a solution that fully supports isokinetic condition evaluations.

It meets all the functional and regulatory requirements outlined in standards such as EPA Methods 1 and 2, EN 16911:2013, and guidelines like CEN/TR 17078:2017, including sampling point positioning in accordance with EN 15259.

Beyond velocity profiling, the ST2 can be paired with QB1-z sampler to perform isokinetic sampling in compliance with EN 13284:2017, ISO 9096:2017, and EPA Methods 5 and 17.

Part number and accessories

101 107 1001ST2 Velocity/Flowrate meter

101 107 2011Fixed/mobile point option

101 107 2013ST2 Zero dP Option

101 107 2015CP2 fixing kit

101 107 2020ST2 locking system for HP5

101 107 2030ST2 locking system for CP5

101 107 2040dP sensor leak test device

Technical characteristics

Constructive	Connections	Quick connectors
	Operating Conditions	0 ÷ 45°C 95% UR
	Storage conditions	-10 ÷ 50°C 95% UR
	Display	1,3" Oled
	Communication	Wireless
	Internal memory	8 MB
	Power supply	5V/500 mA microusb
	Materials	ABS with rubber edges
	Keyboard	Polycarbonate, tactile effect
	Dimensions	136x71x59mm
	Weight	350g (without fixing kit)
Differential pressure	dP Pitot	-100 ÷ 2500 Pa (-10÷250 mmH ₂ O)
	Hysteresis and Linearity	0.25 % F.S
	Accuracy	Better than 1% (± 2 Pa)
	Resolution	0.01 Pa (0.005 mmH ₂ O)
	Maximum burst pressure	max. 30 kPa (3000 mmH ₂ O)
Absolute pressure	Static and barometric	10 ÷ 105 kPa (1050 mBar)
	Hysteresis and Linearity	0.25 % F.S
	Resolution	0.01 kPa (0.1 mBar)
	Accuracy	Better than 1% (± 0.25 kPa)
Thermocouple Input	Programmed curve	std type "K" ITS 1990
	Range	-20 ÷ 1200 °C
	Resolution	0.01 °C
	Accuracy	1% (± 0.4 °C)

Dimensions (mm)

