

Continuous Emission Monitoring Systems

► THT-FLO-50

***THT-FLO-50** is a specific instrument for measuring the flow rate and velocity of stack gases, and it represents the ideal complement to any CEMS/SME system in compliance with current regulations for emissions monitoring.*

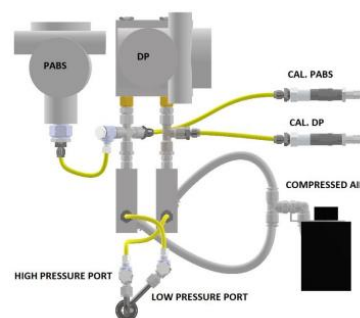
This Flow Meter, designed and manufactured by TECNOVA HT thanks to its decades of experience in the field of Certified Stack Emission Measurements, is a technically advanced yet user-friendly solution. It fully complies with current regulations, meeting the requirements of **UNI EN 15259** *Air quality – Measurement of stationary source emissions – Requirements for measurement sections and sites and for the measurement objective, plan and report* and **UNI EN 16911-2** *Stationary source emissions – Manual and automated determination of velocity and volume flow rate in ducts – Part 2: Automated measuring systems*.



THT-FLO-50 is a complete system being composed of several sensors such as a standardized **Darcy Probe** and **Differential Pressure** Transmitter for measuring volumetric flow, **Absolute Pressure** and **Temperature** for dynamic compensation of the measured value.

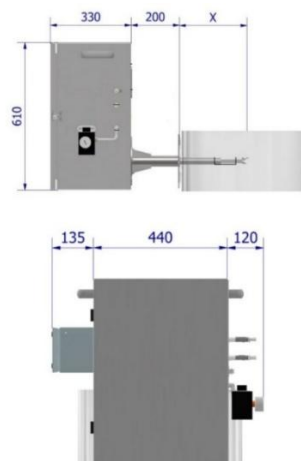
THT-FLO-50 is designed for a **fixed installation directly on any stack** as it is already equipped with a connection flange and you can choose different lengths of Darcy insertion probe.

THT-FLO-50 is also an ideal instrument for dirty and particulate-rich flue gases thanks to its **compressed air self-cleaning system** that can be fully timed according to the specific fouling curve for each stack.



THT-FLO-50 also boasts a **user-friendly man-machine interface** thanks to the polycarbonate keypad and backlit display for managing critical parameters, such as automatic partitioning via solenoid valves, including pressure gauge and flow controller, **RS485 data output** and external access for easy sensor calibration.

THT-FLO-50 is an extremely **compact and lightweight** flow meter that can be installed anywhere without complex and costly mechanical interventions



Technical Specifications

GENERAL	
Standard Length (x) Flange - Darcy Probe	300 mm - 600 mm - 900 mm Other lengths available upon request
Weight	≈ 25 kg
Environmental Conditions	Ambient temperature: -20 ÷ +50 °C Ambient humidity: 0 ÷ 100% RH
Process Conditions	Flue gas temperature: max +300 °C Flue gas velocity: max 30 m/s
Power Supply	230 V AC, 50÷60 Hz
Mechanical Connection	Flange DN65, 150 mm
INTERFACE & OUTPUT SIGNALS	
Local Interface	Backlit LCD display with polycarbonate keypad
Digital Protocols	RS485 Modbus
Analog Outputs	4 x 4-20 mA configurable for: velocity, flow rate, differential pressure, absolute pressure, temperature
Digital Outputs	0-24 VDC NC relay for fault 0-24 VDC NO relay for maintenance
INTEGRATED SENSORS	
Differential Pressure	Range: 0-1 kPa (0-10 mbar) Accuracy: ±0.1%
Flue Gas Absolute Pressure	Range: 80-110 kPa (800-1,100 mbar) Accuracy: ±0.2%
Flue Gas Temperature	Range: 0-300 °C Accuracy: ±1%
INTEGRATED FEATURES	
Internal heater and built-in case temperature sensor	
Electrically heated Pitot tube with temperature monitoring and built-in safety alarm	
Integrated automatic compressed air backflow cleaning system	
OPTIONS ON REQUEST	
LAT Certification for RTD and/or pressure sensors	
Input signal for Absolute Pressure from existing 4-20 mA loop-powered external transmitter	

All technical specifications are subject to change by TECNOVA HT without prior notice