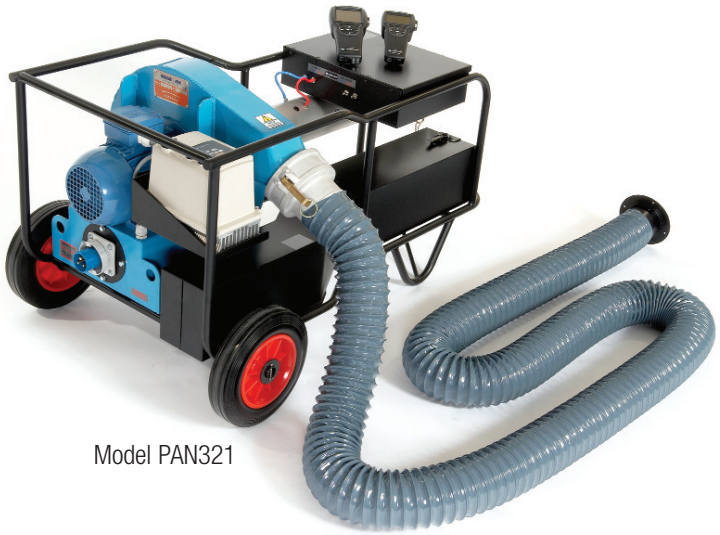
Duct Leakage Testers



Model PAN321

Positive and Negative Duct Accreditation (PANDA) System

Model PAN300 Series

The Positive and Negative Duct Accreditation (PANDA) system provides contractors, commissioning engineers, and research and development technicians with the best in class choice of test equipment to quantify air leakage in ductwork and other areas as well as the ability to measure the performance of ducted systems. The PANDA provides a fast, accurate, automated solution and helps to ensure compliance with EN12237, EN1507 and EUROVENT 2/2 standards, enhancing energy savings in buildings.

Features and Benefits

- Positive and Negative Duct Leakage Testing in one rig
- Energy savings by testing and minimizing duct leaks
- Compliant with the following standards:
  - EN12237 Ventilation for Buildings—Ductwork—Strength & Leakage of Circular Sheet Metal Ducts
  - EN1507 Ventilation for Buildings—Sheet Metal ducts with Rectangular Section—Requirements for Strength and Leakage
  - EUROVENT 2/2 Air Leakage Rate in Sheet Metal Air Distribution Systems
- Accuracy is ± 2,5% of volume flow
- Unique performance and fan speed control charge up of duct system to test static pressure within minutes
- Fits in the back of vans and estate cars
- Model PAN321 comes with standard Airflow TA460-P Multi-Function Instrument and PVM620 Micromanometer.
  - Automatically calculates leakage rate in real time
  - Simultaneous displays flow leakage rate and static pressure
  - Provides a pass/fail indication for a given tightness class
  - Automatically corrects actual volume flow leakage rate to Standard Temperature and Pressure (STP)
  - Monitors barometric pressure and temperature in real time
  - Stores data that can be downloaded for report generation and documentation
  - Works with Model 8934 Portable Printer

Accurate. Reliable. Every Time.

TSI | AIRFLOW™ INSTRUMENTS

Duct Leakage Testers

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Specifications

Model PAN300 Series

Pressure Measurement (PVM620)

Range	± 3,735 Pa (± 15 in. W.G.)
Resolution	0.1 Pa (0.001 in. W.G.)
Accuracy	1% of reading ± 1 Pa (± 0.005 in. W.G.)
Actual Duct Static Range	± 2,500 Pa (± 10 in. W.G.) at Zero Flow

Volume Flow Measurement (TA460-P)

Wilson Radial Flow Grid	High leakage range: 10 to 200 l/s (36 to 720 m^3/hr, 21 to 424 cfm)
15 mm Conical Inlet Nozzle Adapter	Low leakage range: 1 to 13 l/s (3.6 to 46.9 m^3/hr, 2 to 27.5 cfm)
Resolution	0.01 l/s (0.01 m^3/hr, 0.01 cfm)
Accuracy	± 2.5% of reading ± 0.01 l/s (± 0.04 m^3/hr, ± 0.02 cfm)

Temperature Measurement (TA460-P)

K Type thermocouple probe	To EN60584 (IEC 584)

Barometric Pressure Measurement (TA460-P)

Range	690 to 1,241 hPa (517.5 to 930.87 mm Hg, 20.36 to 36.648 in. Hg)
Accuracy	± 2% of reading

Power requirements

Model PAN321*	220 to 240 V, 1 Phase, 50/60 Hz, 10A
Model PAN321-110*	110 to 120 V, 1 Phase, 50/60 Hz, 16A
Model PAN311**	220 to 240 V, 1 Phase, 50/60 Hz, 10A
Model PAN311-110**	110 to 120 V, 1 Phase, 50/60 Hz, 16A

Weight

71 kg (157 lbs.)

Dimensions (L x W x H)

1,130 mm x 660 mm x 510 mm (44.5 in. x 26 in. x 20 in.)

TA460-P and PVM620

See spec sheets for details on individual instruments

* Model: instruments included

** Model: instruments NOT included

Model TA460-P

Ductwork Classification Table

Air Tightness Class	Static Pressure Limit (p_s) Pa		Air Leakage Limit (f_{max}) $m^3 .s^{-1} m^{-2}$
	Positive	Negative	
A	500	500	$0.027 \times p_t^{0.65} \times 10^{-3}$
B	1,000	750	$0.009 \times p_t^{0.65} \times 10^{-3}$
C	2,000	750	$0.003 \times p_t^{0.65} \times 10^{-3}$
D[1]	2,000	750	$0.001 \times p_t^{0.65} \times 10^{-3}$

[1] Ductwork for special applications

Specifications subject to change without notice.

Thank you for reading this data sheet.

For pricing or for further information, please contact us at our UK Office, using the details below.

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