



® Knowledge Beyond Measure.

# Duct Leakage Tester

Model PAN341 Series

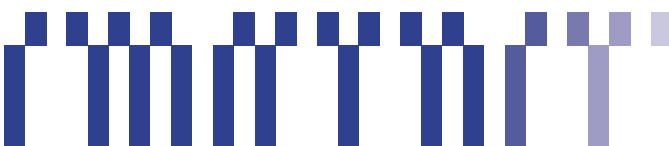


## Positive and Negative Duct Accreditation (panda) system

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, eurovent 2/2 and smacna 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 and 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
  - SMACNA Air Duct Leakage Testing
- Accuracy is  $\pm 2.5\%$  of volume flow
- Unique performance and fan speed control charge up of duct system to test static pressure within minutes
- Carry weight 45 kg (99 lbs.)
- Fits in the back of vans and estate cars
- Model PAN341-NB comes with standard Airflow TA550-NB Multi-Function Instrument and PVM610 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



## Specifications

# Duct Leakage Tester

Model PAN341 series

### Pressure Measurement (PVM610)

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 (TA550-NB)

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

### Temperature Measurement (TA550-NB)

K Type	To EN60584 (IEC 584)
Thermocouple Probe	

### Barometric Pressure Measurement (TA550-NB)

Range	690 to 1,241 hPa (517.15 to 930.87 mm Hg, 20.36 to 36.648 in. Hg)
Accuracy	± 2% of reading

### Power requirements

Model PAN341-NB*	220 to 240 V, 1 Phase, 50/60 Hz, 10A
Model PAN341-110-NB*	110 to 120 V, 1 Phase, 50/60 Hz, 16A
Model PAN315**	220 to 240 V, 1 Phase, 50/60 Hz, 10A
Model PAN315-110**	110 to 120 V, 1 Phase, 50/60 Hz, 16A

### Weight

Carry Weight	45 kg (99 lbs.)
Total Weight	55 kg (121 lbs.)

### Dimensions (L x W x H)

1,130 mm x 660 mm x 600 mm (44.5 in. x 26 in. x 23.5 in.)

### TA550-NB and PVM610

See spec sheets for details on individual instruments

\* Model: instruments included  
\*\* Model: instruments NOT included

Specifications are subject to change without notice.

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### Ductwork Classification Table

Air Tightness Class	Static Pressure Limit (p <sub>s</sub> ) Pa		Air Leakage Limit (f <sub>max</sub> ) m <sup>3</sup> .s <sup>-1</sup> m <sup>-2</sup>
	Positive	Negative	
A	500	500	0.027 x p <sub>t</sub> <sup>0.65</sup> x 10 <sup>-3</sup>
B	1,000	750	0.009 x p <sub>t</sub> <sup>0.65</sup> x 10 <sup>-3</sup>
C	2,000	750	0.003 x p <sub>t</sub> <sup>0.65</sup> x 10 <sup>-3</sup>
D <sup>1</sup>	2,000	750	0.001 x p <sub>t</sub> <sup>0.65</sup> x 10 <sup>-3</sup>

<sup>1</sup> Ductwork for special applications



TA550-NB

Model PVM610



Carry Weight: 45 kg (99 lbs.) with Instrument Box and Flex Carrying Tube Removed.



Airflow Instruments, TSI Instruments Ltd.

Visit our website at [www.tsi.com/Airflow-Instruments](http://www.tsi.com/Airflow-Instruments) for more information.

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