



Duct Leakage Testers



Model PAN341

Positive and Negative Duct Accreditation (PANDA) System Model PAN341

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 comes with standard Airflow TA465-P 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
 - Works with Model 8934 Portable Printer

Accurate. Reliable. Every Time.



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Positive and Negative Duct
Accreditation (PANDA) System

Model PAN341 Series

Specifications

Model PAN341 Series

Pressure Measurement (PVM610)

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

Volume Flow Measurement (TA465-P)

Wilson Radial Flow Grid High leakage range: 10 to 200 l/s
(36 to 720 m³/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 ($0.01 \text{ m}^3/\text{hr}$, 0.01 cfm)
Accuracy	$\pm 2.5\%$ of reading $\pm 0.01 \text{ l/s}$ ($\pm 0.04 \text{ m}^3/\text{hr}$, $\pm 0.02 \text{ cfm}$)

Temperature Measurement (TA465-P)

K Type thermocouple probe To EN60584 (IEC 584)

Barometric Pressure Measurement (TA465-P)

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

Power requirements

Model PAN341*	220 to 240 V, 1 Phase, 50/60 Hz, 10A
Model PAN341-110*	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.)

TA465-P and PVM610

See spec sheets for details on individual instruments

* Model: instruments included

** Model: instruments NOT included

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			

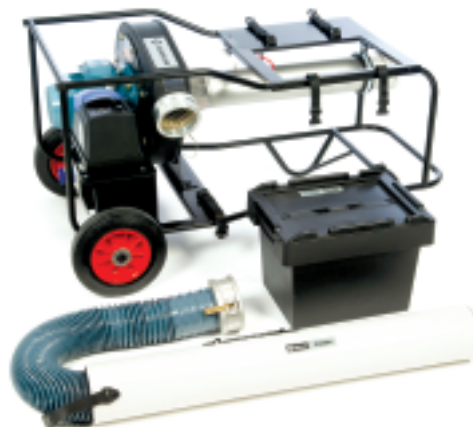
Specifications subject to change without notice.



Model TA465-P



Model PVM610



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

www.norrscope.com