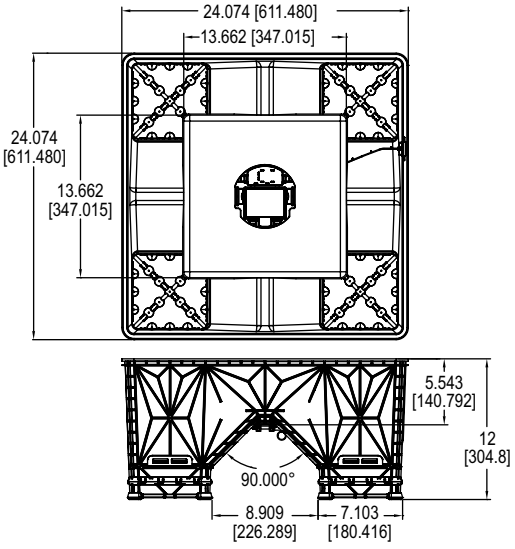
Dwyer

SERIES SAH

SMART AIR HOOD™ BALANCING INSTRUMENT

Quad Flow Design Technology, Predictive Balancing



VIDEO ONLINE

2016 DEALER DESIGN AWARDS
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The **SERIES SAH** SMART Air Hood™ Balancing Instrument is the most accurate and easy to operate air flow hood on the market. By using the included hood stand and wireless communications to the handheld, a single operator can balance a branch in less time than traditional balancing teams. Besides being lighter than most traditional capture hoods, the ergonomic design makes the Series SAH easy to maneuver, with less physical stress. The rugged polypropylene base hood features patented Quad Flow Design Technology for controlling air flow and minimizing back pressure, which yields superior measurement accuracy. The Wi-Fi direct communication gives reliable communication with a distance of up to 200 yards (183 m) between the hood and the handheld test instrument. The SMART Air Hood™ Balancing Instrument includes the PredictAir™ Application Software which reduces the number of steps in the air flow balancing process using Predictive Balancing's Express Balance mode. Predictive Balancing is a method of predicting the optimal flow set point for each register and the order in which they should be adjusted.

FEATURES/BENEFITS

- Patent pending Quad Flow Design Technology directs the circulating air patterns to provide a more even air flow that minimizes backpressure enabling accurate readings
- Predictive Balancing is a process that guides the balancing technician on setting the optimal flow set point for each sequential terminal. With the PredictAir™ Application Software, the balancing process takes much less time than traditional air balancing methods
- The ergonomic design is much lighter and easier to work with than the existing bulky air hoods, providing greater maneuverability and less physical strain. One technician can complete the air balancing
- Wi-Fi direct wireless communication provides a range up to 200 yards (183 m) line of sight

APPLICATIONS

- Commissioning, testing, adjusting and balancing volumetric air flow from diffusers, grilles, and registers in HVAC systems

INCLUDED WITH THE SAH-22-AU:

- Translucent gray 2´ x 2´ (0.6 m x 0.6m) SAH base unit
- Handheld Test Instrument preloaded with PredictAir™
- 2´ to 4´ (0.6 m x 1.2 m) extendable pole
- 4.5´ to 12´ (1.4 m x 3.7 m) extendable pole
- Pole safety clamp
- Stationary pole adapter
- Handheld quick release pole adapter kit
- SAH roller travel case with instrument available foam inserts
- 4-port universal wall charger
- Charging cables for SAH and handheld test instrument
- Handheld - SAH wired connection adapter
- Installation and operating manual
- Calibration return shipping box for Quad Sensing Grids and Sensor Module
- NIST Traceable Certificate

SPECIFICATIONS

VOLUME FLOW
Service: Air.
Units: CFM, m^3/h, l/s.
Volume Flow Ranges: Supply: 40 to 2000 CFM (68 to 3398 m^3/h) (19 to 944 l/s); Exhaust: 80 to 2000 CFM (136 to 3398 m^3/h) (38 to 944 l/s).
Accuracy > 40 CFM: ±3% of reading ±7 CFM (11.9 m^3/hr) (3.3 l/s).
Resolution: 1 CFM (1.7 m^3/h) (.5 l/s).
Power Requirements: 3.6 V NCR18650B MH12210 lithium ion battery, included, user replaceable or (4) 1.5 V AA alkaline batteries, not included, user replaceable.
Housing Material: Polypropylene.
Weight: 5.75 lb (2.6 kg).
Agency Approvals: CE, FCC, IC, RCM.

MODEL CHART

Model	Description
SAH-22-AU	SMART Air Hood with 2´ x 2´ (0.6 m x 0.6 m) opening (Aus & NZ only)

ACCESSORIES

Model	Description
A-SAH-14S	Canvas hood 1´ x 4´ (0.3 m x 1.2 m)
A-SAH-24S	Canvas hood, 2´ x 4´ (0.6 m x 1.2 m)
A-SAH-33S	Canvas hood, 3´ x 3´ (0.9 m x 0.9 m)
A-SAH-BK	SAH adapter base kit for canvas hood
A-SAH-CK	Spare calibration kit with four Quad Flow Sensing Grids and Sensor Module
A-SAH-12P	4.5´ to 12´ (1.4 m x 3.7 m) extendable pole
NISTCALM-SAH	Re-certification service. Please call our customer service to schedule at 61-2-4272-2055

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SERIES SAH

PREDICTAIR™ APPLICATION SOFTWARE

Includes Diffuser Flow Coefficient Library, Predictive Balancing, Logging

VIDEO ONLINE

The **PREDICTAIR™** Application Software displays flow measurements from Dwyer's SMART Air Hood™ Balancing Instrument and guides balancers through the balancing process using Predictive Balancing. Predictive Balancing is a method of predicting the optimal flow setting for each register in order to balance the HVAC system accurately and efficiently. PredictAir™ Application Software is factory installed into the handheld unit that comes with the SMART Air Hood™ Balancing Instrument.

FEATURES/BENEFITS

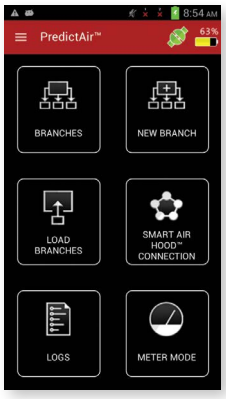
- Extensive diffuser library has flow coefficients that calibrates the Series SAH to within ±3% ±7 CFM of reading accuracy for any diffuser type in the library
- Predictive Balancing process determines the order and set points for adjusting registers in the balancing process
- Generates and shares air balancing reports directly from the handheld device

APPLICATIONS

- Commissioning, testing, adjusting and balancing volumetric air flow from diffusers, grilles, and registers in HVAC systems

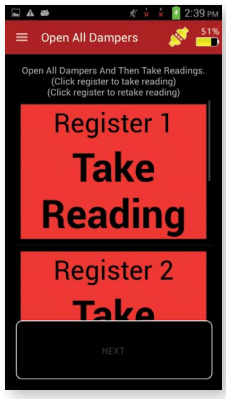
SPECIFICATIONS
Operating System: PredictAir™ Application Software only available with factory supplied test instrument.
Wireless Protocol: Wi-Fi direct low energy wireless technology.
Response Time: 1 s.
Updates to diffuser library can be downloaded using Google Play™ store.

Handheld Home Screen



Application Main Menu

Meter Mode



Predictive Balancing Mode

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