

# Rotating Vane Anemometers Model LCA301

Model LCA301 is a light weight, robust, and simple to use Rotating Vane Anemometer that provides accurate and reliable readings every time. Ideal for HVAC commissioning at grilles, ducts, and diffusers; the LCA301 displays readings in metric or imperial mode.

#### **Features and Benefits**

Reversible 100 mm head allows readings at supply and extract grilles

Rotating Vanes

- Calculates volumetric flow rate
- Compatible with Aircone Flow Hoods
- No density correction factors required
- Automatic averaging of air velocity

# Rotating Vane Anemometers Model LCA501

Model LCA501 is a hand held digital Rotating Vane Anemometer used for air velocity and volumetric flow measurements.

#### **Features and Benefits**

- Measures velocity and temperature
- Sweep mode for one overall measurement
- Log, store, and recall data
- Download data to a PC
- Optional telescopic probe available



## **Anemometers**

**Rotating Vane Anemometers** 

### Models LCA301 and LCA501

#### **Specifications**

Models LCA301 and LCA501

Velocity

Range 0.25 to 30 m/s (50 to 6,000 ft/min) Accuracy ±1.0% of reading ±0.02 m/s (±4 ft/min)

**Resolution** 0.01 m/s (1 ft/min)

**Duct Size** 

Range

**LCA301** 0.00399 - 90 m<sup>2</sup> (0.043 - 900 ft<sup>2</sup>)

**LCA501** 0 - 16 m<sup>2</sup> (0 - 173.6 ft<sup>2</sup>)

**Volumetric Flow rate** 

Range Actual range is a function of velocity and duct area

Resolution

**LCA301** <100; 0.1 l/s, 0.1 m³/hr, 0.1 ft³/min **LCA501** <100; 0.01 l/s, 0.01 m³/hr, 0.01 ft³/min

**Temperature** 

 $\begin{array}{lll} \mbox{Range} & 0 \mbox{ to } 60^{\circ}\mbox{C} \ (32 \mbox{ to } 140^{\circ}\mbox{F}) \\ \mbox{Accuracy} & \pm 1.0^{\circ}\mbox{C} \ (\pm 2.0^{\circ}\mbox{F}) \\ \mbox{Resolution} & 0.1^{\circ}\mbox{C} \ (0.1^{\circ}\mbox{F}) \end{array}$ 

**Instrument Temperature Range** 

LCA301

**Operating** 0 to 60°C (32 to 140°F) **Storage** -10 to 60°C (14 to 140°F)

LCA501

**Operating** 5 to 45°C (40 to 113°F) **Storage** -20 to 60°C (-4 to 140°F)

Data Storage Capabilities (LCA501 only)

Range 12,700+ samples and 100 test IDs

Logging Interval (LCA501 only)

From 1 second to 1 hour

Time Constant (LCA501 only)

User selectable

**External Meter Dimensions:** 

LCA301 1.2 cm x 28 cm x 6.5 cm (4.5 in. x 11 in. x 2.6 in.) LCA501 8.4 cm x 17.8 cm x 4.4 cm (3.3 in. x 7 in. x 1.8 in.)

Meter Weight with batteries:

**LCA301** 329 g (11.6 oz.) **LCA501** 270 g (9.6 oz.)

**Power Requirements:** 

**LCA501** 9-volt battery

**LCA301** Four AA-size batteries or AC adapter

	LCA301	LCA501
Temperature	•	•
Velocity	•	•
100 mm reversible head	•	•
Flow, sweep mode	•	•
Telescoping handle (optional)		•
Data logging, recall, review, download		•
Use with Aircone flow hoods	•	•
Free Certificate of Calibration	•	•

### **Aircone Flow Hoods**

Aircone Flow Hoods are a fast and accurate method of maximizing the usefulness of your 100 mm rotating vane anemometers. For a modest investment, you can enhance the capability of your rotating vane, turning it into an air volume flow balancing tool.



#### **Features and Benefits**

- Rectangular and circular cones available
- Measures volumetric flow at grilles and diffusers in l/s, m³/h, or ft³/min
- Reads air volume quickly and accurately
- Excellent choice for small grilles
- Meets the HM Government Building Regulations of 2010 when using the rectangular aircone

#### Specifications

Aircone Flow Hoods

Size

**Rectangular cone** 285 mm x 235 mm (11 in. x 9 in.) **Round cone** 180 mm (7 in.) diameter

Range (with LCA301 or LCA501)

0 to 100 l/s, 0 to 360 m<sup>3</sup>/h (0 to 210 ft<sup>3</sup>/min)

Weight (includes case)

1.1 kg (2.4 lbs)

**Ordering Information** 

**LCA301** Rotating Vane Anemometer with carrying case, 9V alkaline

battery, operations manual, and calibration certificate.

**LCA501** Rotating Vane Anemometer with carrying case, alkaline

batteries, operations manual, calibration certificate, USB

cable, and LogDat2™ downloading software.

**Rotating Vane Anemometer Kits** 

AFL72900001 Kit includes LCA301 Rotating Vane Anemometer with

rectangular Aircone

AFL72900002 Kit includes LCA501 Rotating Vane Anemometer with

rectangular Aircone

Accessories

AFL72852201 Round and rectangular Aircone kit

AFL72852204 Round Aircone only

**AFL71933702** Telescopic, articulated extension (LCA501 only)

Specifications subject to change without notice. LogDat2 is a trademark of TSI Incorporated.



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