

# ROTATING VANE ANEMOMETERS MODELS LCA301 AND LCA501

## 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, filters, and kitchen exhausts; the LCA301 displays readings in metric or imperial mode.

## Model LCA501

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



## Features and Benefits

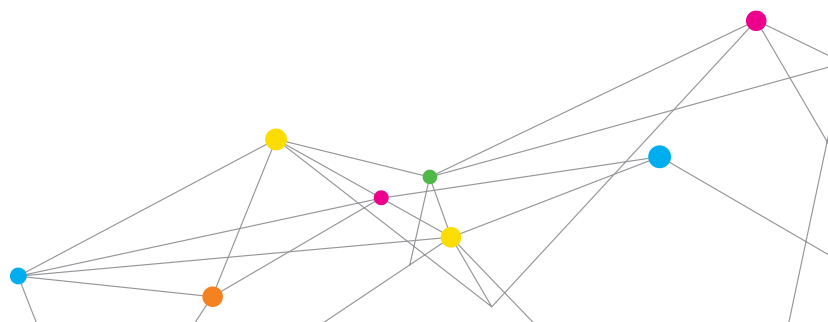
### (Model LCA301)

- + Reversible 100 mm head allows readings at supply and extract grilles
- + Calculates volumetric flow rate
- + Compatible with Aircone Flow Hoods
- + No density correction factors required
- + Automatic averaging of air velocity

## Added Features and Benefits

### (Model LCA501)

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



# SPECIFICATIONS

## ROTATING VANE ANEMOMETERS MODELS LCA301 AND LCA501

### Velocity

Range 0.25 to 30 m/s (50 to 6,000 ft/min)  
Accuracy  $\pm 1.0\%$  of reading  $\pm 0.02$  m/s ( $\pm 4$  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 - 46.45 m<sup>2</sup> (0 - 500 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 m<sup>3</sup>/hr, 0.1 ft<sup>3</sup>/min  
LCA501 <100; 0.01 l/s, 0.01 m<sup>3</sup>/hr, 0.01 ft<sup>3</sup>/min

### Temperature

Range 5 to 45°C (40 to 113°F)  
Accuracy  $\pm 1.0^\circ\text{C}$  ( $\pm 2.0^\circ\text{F}$ )  
Resolution LCA301 0.1°C (1°F)  
Resolution LCA501 0.1°C (0.1°F)

### Instrument Temperature Range

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

Specifications subject to change without notice.

TSI and the TSI Logo are registered trademarks, and Airflow, the Airflow logo and LogDat2 are trademarks of TSI Incorporated.

## 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, m<sup>3</sup>/h, or ft<sup>3</sup>/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)

	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	+	+

## TO ORDER

**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)



Thank you for reading this data sheet.

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



**UK Office**

**Keison Products,**

**P.O. Box 2124, Chelmsford, Essex, CM1 3UP, England.**

**Tel: +44 (0)330 088 0560**

**Fax: +44 (0)1245 808399**

**Email: [sales@keison.co.uk](mailto:sales@keison.co.uk)**

Please note - Product designs and specifications are subject to change without notice. The user is responsible for determining the suitability of this product.