

# 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

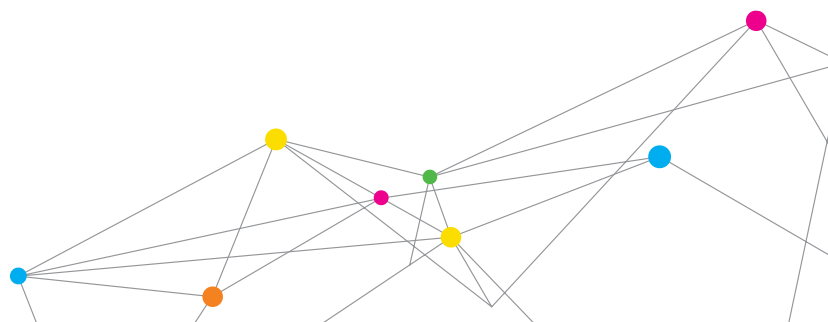
### (Model LCA301)

- + 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.

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## 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)



**Airflow Instruments, TSI Instruments Ltd.**

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