



® Knowledge Beyond Measure.

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.

Features and Benefits

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

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
- 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 | ±1.0% of reading ±0.02 m/s (±4 ft/min) |
| Resolution | 0.01 m/s (1 ft/min) |

Duct Size

| | |
|--------|--|
| LCA301 | 0.00399 - 90 m ² (0.043 - 900 ft ²) |
| LCA501 | 0 - 46.45 m ² (0 - 500 ft ²) |

Volumetric Flow Rate

| | |
|--------|--|
| LCA301 | <100; 0.1 l/s, 0.1 m ³ /hr, 0.1 ft ³ /min |
| LCA501 | <100; 0.01 l/s, 0.01 m ³ /hr, 0.01 ft ³ /min |

Temperature

| | |
|-------------------|-------------------------|
| Range | 5 to 45°C (40 to 113°F) |
| Accuracy | ±1.0°C (±2.0°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 | 12 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

| | |
|--------|--------------------------------------|
| LCA301 | 9-volt battery |
| LCA501 | Four AA-size batteries or AC adapter |

Specifications are 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, 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 m³/h (0 to 210 ft³/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) cartridges |