

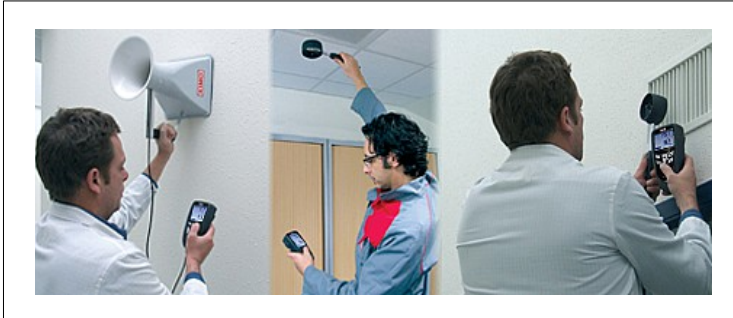
## Vane Probe Thermo-Anemometers

CE



Calibration  
certificate

# LV 101 - 107 - 110



### Functions

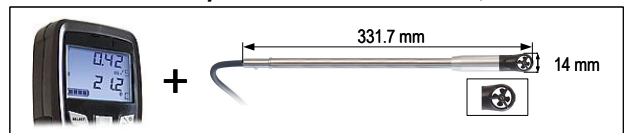
- Air Velocity and Ambient Temperature
- Selection of Units
- HOLD Function
- Minimum and Maximum Values
- Automatic Average
- Airflow Calculation
- Airflow Calculation with Cone
- Adjustable Automatic Shut-off
- Adjustable Backlight
- Detection of Flow direction
- **Automatic CFM Measurements**

### Technical features

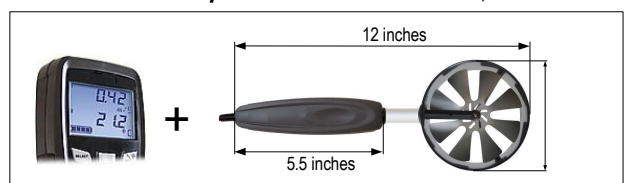
<b>Measuring Elements</b>	<b>Vane Probe Anemometer :</b> LV110 : Hall effect sensor
	<b>Ambient temperature :</b> Pt100 class A
<b>Display</b>	2 lines, LCD technology. Sizes 50 x 34.9 mm. 1 line of 5 digits with 7 segments (value) 1 line of 5 digits with 16 segments (unit)
<b>Housing</b>	Shock-proof made of ABS, IP54 protection
<b>Keypad</b>	Metal-coated with 5 keys
<b>Cable</b>	retractable, length 450 mm, up to 2.4 m when released
<b>Conformity</b>	electromagnetical compatibility (NF EN 61326-1 guideline)
<b>Power Supply</b>	1 alkaline battery 9V Included
<b>Operating Temperature (instrument)</b>	from 0 to 122°F
<b>Operating Temperature (probe)</b>	from -4 to +176°F
<b>Storage temperature</b>	from -4 to +176°F
<b>Auto Shut-off</b>	adjustable from 0 to 120 min
<b>Weight</b>	6.7 oz.
<b>Languages</b>	English, French



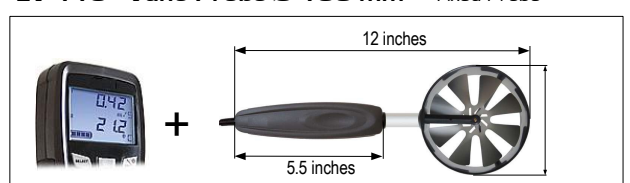
LV 101 - Vane probe Ø 14 mm - Fixed probe



LV 107 - Vane probe Ø 70 mm - Fixed probe



LV 110 - Vane Probe Ø 100 mm - Fixed Probe



**Specifications**

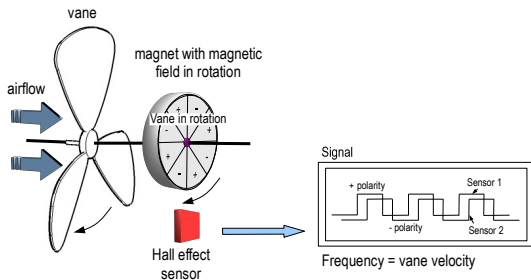
	Measuring units	Measuring ranges	Accuracy*	Resolutions
<b>AIR VELOCITY</b>				
LV 101 Ø 14 mm	m/s, fpm, Km/h	from 0.8 to 3 m/s from 3.1 to 40 m/s	±3% of reading ±0.1m/s ±1% of reading ±0.3m/s	0.1 m/s
LV 107 Ø 70 mm	m/s, fpm, Km/h	from 0.3 to 3 m/s from 3.1 to 35 m/s	±3% of reading ±0.1m/s ±1% of reading ±0.3m/s	0.1 m/s
LV 110 Ø 100 mm	m/s, fpm, Km/h	from 0.25 to 3 m/s from 3.1 to 35 m/s	±3% of reading ±0.1m/s ±1% of reading ±0.3m/s	0.01 m/s 0.1 m/s
<b>AIR FLOW</b>				
All models	m³/h, cfm, l/s, m³/h	from 0 to 99999 m³/h	±3% of reading ±0.03 *area(cm²)	1 m³/h
<b>AMBIENT TEMPERATURE</b>				
All models	°C, °F	from -20 to +80°C	±0.4% of reading ±0.3°C	0.1°C

\*All accuracies indicated in this document were stated in laboratory conditions and can be guaranteed for measurements carried out in the same conditions, or carried out with required compensation.

**Working principle**

**Anemometer : Hall Effect Sensor**

Rotation of the shaft of the vane powers a circular magnet of 8 poles. A dual Hall effect sensor, placed next to the magnet senses the signals of magnetic field polarity transition. The sensor signal is converted to electrical frequency and is proportional to the air velocity. Signal chronology allows the detection of rotation direction.

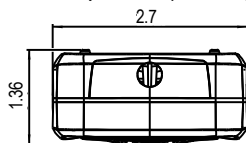


**Thermometer : Pt100 probe**

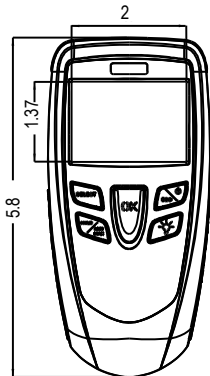
Pt100 is a resistance with a positive temperature coefficient which varies according to the temperature. The higher the temperature is, the more the value of the resistance increases. ie : for 0°C ≈ 100 Ω - for 100°C ≈ 138.5 Ω.

**Dimensions**

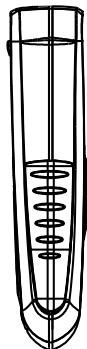
• Top View (inches)



• Front View



• Side View



**Supplied with ...**



● Supplied with ○ Optional

DESCRIPTION	LV 101	LV 107	LV 110
Ø 14 mm vane probe	●		
Ø 70 mm vane probe		●	
Ø 100 mm vane probe			●
Air flow cone K25			○
Air flow cone K35-75-120 or 150	○		
Calibration certificate*	○	○	○
Transport case	●	●	●

**Accessories (See related datasheet)**

RTS	CE 100
Telescopic extension (for probe), 1m long and bent at 90°	Protective cover with magnet and holding system
RD 300	K 25
To be clipped extension for Ø14 mm vane (RD300), Ø 10 mm. length 300 mm (12 inches)	Air flow cone (See related datasheet)

**Warranty Period**

Instruments have 1-year guarantee for any manufacturing defect (return to our Service Department for Repair and/or Calibration).

- [E Instruments LV101S Portable Thermo Anemometer](#)
- [E Instruments LV107S Portable Thermo Anemometer](#)
- [E Instruments LV110S Portable Thermo Anemometer](#)
- [E Instruments LV120S Portable Thermo Anemometer](#)
- [E Instruments LV130S Portable Thermo Anemometer](#)