

USER MANUAL

# LV 130

## Vane probe thermo-anemometer



### Description of the device

1. OK key
2. Backlight key
3. Select key
4. On/Off/Esc key
5. Hold/min/max key

### General features

Measuring elements	Air velocity: Hall effect sensor / Ambient temperature: NTC
Display	4 lines, LCD technology. Dimensions 50 x 36 mm. 2 lines of 5 digits with 7 segments (value) 2 lines of 5 digits with 16 segments (unit)
Vane diameter	Ø 100 mm
Housing	ABS, protection IP54
Keypad	5 keys
European directives	2014/30/EU EMC; 2014/35/EU Low Voltage; 2011/65/EU RoHS II; 2012/19/EU WEEE
Power supply	4 batteries AAA LR03 1.5 V
Battery life	58 hours <sup>(1)</sup>
Ambiance	Neutral gas
Conditions of use (°C, %RH, m)	From 0 to +50 °C. In non condensing conditions. From 0 to 2000 m.
Operating temperature (probe)	From 0 to +50 °C
Storage temperature	From -20 to +80 °C
Auto shut-off	Adjustable from 0 to 120 min
Weight	390 g

### Technical specifications

Parameters	Measuring units	Accuracy <sup>(2)</sup>	Measuring range	Resolution
Air velocity	m/s, fpm, km/h	From 0.3 to 3 m/s: ±3% of reading ±0.1 m/s From 3.1 to 35 m/s: ±1% of reading ±0.3 m/s	From 0.3 to 35 m/s	0.01 m/s 0.1 m/s
Airflow	m³/h, cfm, l/s, m³/s	±3% of reading ±0.03 x area (cm²)	From 0 to 99 999 m³/h	1 m³/h
Temperature	°C, °F	±0.4% of reading ±0.3 °C	From 0 to +50 °C	0.1 °C

<sup>(1)</sup> Battery life given at 20 °C with alkaline batteries.

<sup>(2)</sup> All the accuracies indicated in this technical datasheet were stated in laboratory conditions, and can be guaranteed for measurements carried out in the same conditions, or carried out with calibration compensation.

## Perform a measurement

- Turn on the device by pressing on "On/Off/Esc".  
The device displays its name "LV130".
- Put the probe to the required location.  
The device displays the velocity and temperature measurements.

## Freeze the measurement

During the measurement:

- Press once on "Hold/min/max".  
"Hold" appears on screen and the measurement is frozen.
- Press on "On/Off/Esc" to exit the hold function.  
The device returns to the measurement display.

## Display the minimum and the maximum

Once the measurement is frozen:

- Press once on "Hold/min/max".  
The device displays the maximum value of velocity or airflow measured since the last questioning at the top of the screen and the minimum value of velocity or airflow since the last questioning at the bottom of the screen.
- Press once on "Hold/min/max".  
The device displays the maximum value of temperature measured since the last questioning at the top of the screen and the minimum value of temperature measured since the last questioning at the bottom of the screen.
- Press on "On/Off/Esc" to exit the hold function.  
The device returns to the measurements display.

## Perform an average in velocity

The device is on and displays the measurement:

- Press on "OK".  
"START" displays on screen.
- Press on "OK", the average calculation is launched, "END" displays on screen and "AVG" blinks.
- Press on "OK" to stop the average calculation, the average displays.
- Press on "OK" to display the maximum and minimum values measured during the calculation of this average.
- Press on "On/Off/Esc" to exit the average function and return to the measurement display.

## Display and measure the air flow

It's possible to display and measure the airflow in place of velocity.

The device is on and displays the velocity and temperature measurement.

- Press on "Select".  
"MODE" blinks on screen.
- Press on "OK".  
"VELO" blinks at the bottom of the screen.
- Press on "Select" to select the "FLOW" mode then press on "OK" to validate.  
"CIRC" blinks on screen, press on "Select" to make appear "K 25 85" then "RECT".
- Press on "OK" to validate.  
If "RECT" or "CIRC" are selected, the measuring unit of the duct type displays.
- Press on "Select" to select the unit : mm or inch then press on "OK" to validate.
- **If the type of selected duct is circular:** "DIAM" displays and the first digit blinks.  
Press on "Select" to select its value then press on "OK" to validate. Perform the same procedure to select the value of the following digits (to return to the previous digit press on "On/Off/Esc"). When the last digit is adjusted, press on "OK" to validate. The device return to the display of airflow and velocity measurements.
- **If the type of selected duct is rectangular:** "LENGT" displays and the first digit blinks.  
Press on "Select" to select its value then press on "OK" to validate. Perform the same procedure to select the value of following digits (to return to the previous digit press on "On/Off/Esc"). When the last digit is adjusted, press on "OK".

"WIDTH" to adjust the width, displays on screen, perform the same procedure to select the digits value, when the last digit is adjusted press on "OK" to validate. The device returns to the display of the airflow and temperature measurements.

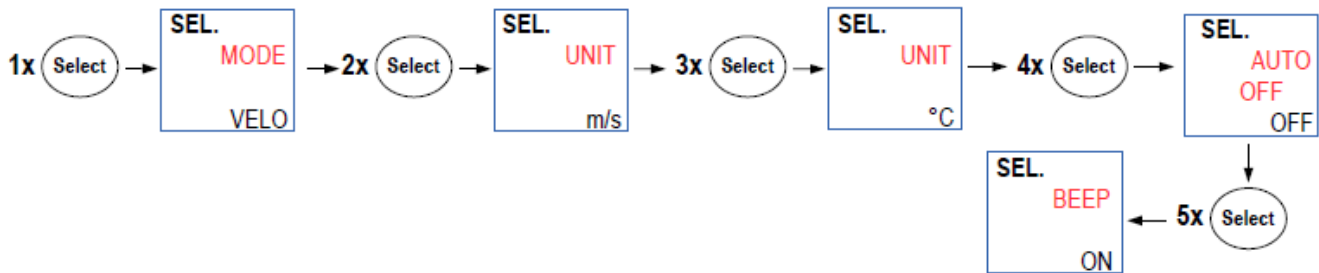
- If "K 25 85" is selected: the device returns to the measurements display.



The length, the width and the section diameter are adjustable from 1 to 3000 mm.

### Adjust the device

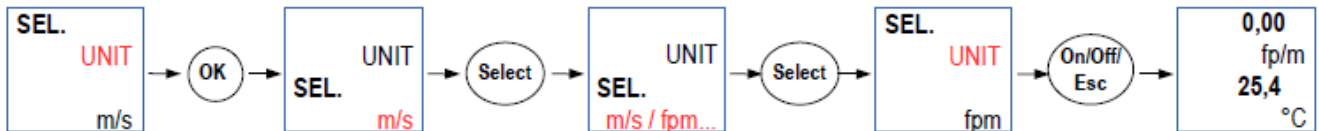
#### Device drop-down menu



#### Select the measuring unit in velocity

The device is on and in velocity mode.

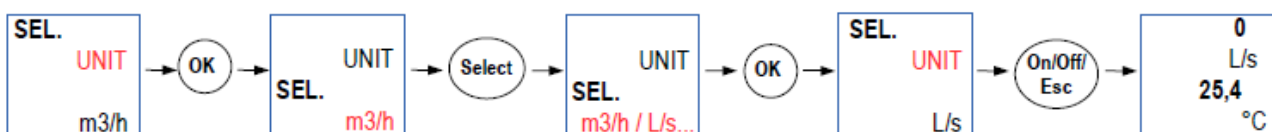
- Press on "Select" until "UNIT" blinks on screen with the velocity unit displayed below.
- Press on "OK".  
The unit currently used blinks on screen.
- Press on "Select" until the required unit appears : m/s, fpm or km/h.
- Press on "OK" to validate the unit selection.  
"UNIT" blinks on screen.
- Press on "On/Off/Esc" to return to the measurement display.



#### Select the measuring unit in airflow

The device is on and in velocity mode.

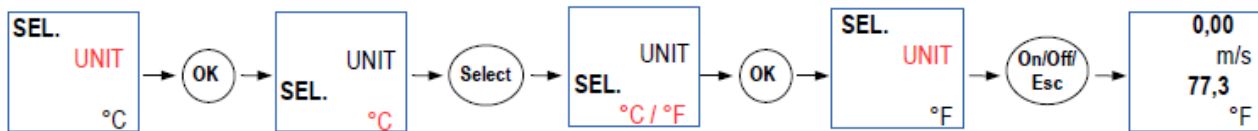
- Press on "Select" until "UNIT" blinks on screen with the airflow unit displayed below.
- Press on "OK".  
The unit currently used blinks on screen.
- Press on "Select" until the required unit appears: m<sup>3</sup>/h, L/s, cfm or m<sup>3</sup>/s.
- Press on "OK" to validate the unit selection.  
"UNIT" blinks on screen.
- Press on "On/Off/Esc" to return to the measurement display.



### Select the measuring unit in temperature

The device is on and display the measurements.

- Press on "Select" until "UNIT" blinks on screen with the temperature unit displayed below.
- Press on "OK".  
The unit currently used blinks at the bottom of the screen.
- Press on "Select" until the required unit appears: °C or °F.
- Press on "OK" to validate.  
"UNIT" blinks on screen.
- Press on "On/Off/Esc" to return to the measurement display.



### Adjust the auto shut-off

The device is on and displays the measurement.

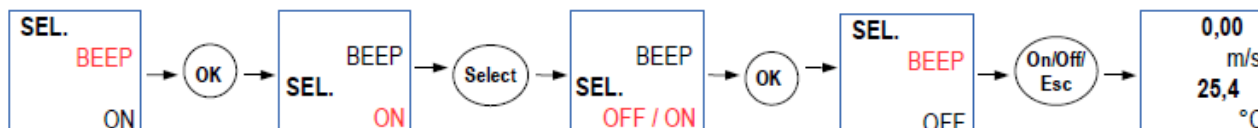
- Press on "Select" until "AUTO OFF" blinks on screen.
- Press on "OK".  
The time before device auto shut-off blinks at the bottom of the screen.
- Press on "Select" until the required time before auto shut-off appears: 15, 30, 45, 60, 75, 90, 105, 120 minutes or OFF.
- Press on "OK" to validate.  
"AUTO OFF" blinks on screen.
- Press on "On/Off/Esc" to return to the measurement.



### Activate or deactivate the key beep

The device is on and displays the measurement.

- Press on "Select" until "BEEP" blinks on screen.
- Press on "OK".  
"OFF" or "ON" blinks on screen.
- Press on "Select" to activate the key beep "ON" or deactivate it "OFF".
- Press on "OK" to validate.  
"BEEP" blinks on screen.
- Press on "On/Off/Esc" to return to the measurement display.



### Activate the backlight

The device is on.

- Press on "Backlight" to activate the device backlight.
- Press again on this key to deactivate the backlight.



### Change the batteries

- Remove the front part at the back of the device.
- Change the old batteries by AAA LR03 1.5V batteries.
- Replace the front part.