

Swema 3

Multifunctional Instrument

Swema 3 is an instrument and a logger with built-in sensors and external anemometers, temperature and humidity sensors. Swema 3 can also connect to a leakage tester and a reference instrument. All models, except Swema 3T, have built-in differential pressure sensors and are therefore high precision micromanometers.

Five main Models

Swema 3 L (771700) micromanometer -300...1500 Pa

Swema 3 LCB (771730) as above with CO₂ sensor; Bluetooth

Swema 3 LH (771800) micromanometer -300...1500 Pa and +/- 10.000 Pa (two sensors)

Swema 3 LHCB (771830) as above with CO₂ sensor; Bluetooth

Swema 3 T (764206) for external sensors and Thermocouple K Probes and instruments are individually calibrated.

Industry and research

The accurate instruments and sensors together with the logging capability meet the high demand for exact measurements of temperature, humidity, differential pressure, air velocity and flow.

Ventilation - Air flow

Swema 3 is designed for TAB - testing and balancing of ventilation systems. It includes a number of specific measuring programs complying with EN 16211, 12599 or ISO 7730. Air velocity is measured with a pitot-static tube or anemometer.

Air flow is displayed from air velocities across an area or measured on a valve with a valve k-factor.

The built-in barometer and thermocouple connector allows for automatically air density compensation of the air velocity and flow.

SwemaTwin is a practical and fast method for adjustment and balancing of ventilation systems using Bluetooth.



Swema 3 L with SWA 32 anemometer



SWEMA AB
Pepparvägen 27
SE-123 56 Farsta, Sweden

Tel: +46 8 94 00 90
swema@swema.com
www.swema.com

Technical Data

General:

Memory: 1.300 protocols or 10.500 logs
Time and date.

Sampling interval: 0,1 second...24 hours

Battery: Lithium, rechargeable

Battery time: Up to 30h

Interface: USB to PC, Bluetooth for modems

PC software: SwemaTerminal 2.1

Size: 212x82x36 mm

IP rating: IP50 (protected against dust)

Swema 3 L ,H:

Time

constant: 0,25...120 s (selectable)

Differential pressure:

-300...1.500Pa (L)
-10.000...10.000Pa (H)

Resolution: 0,01 Pa (L), 0,1 Pa (H)

Pitot static 2...49(L)...129(H)m/s,

tube velocity: 390...9600(L)...9999fpm(H)

Other units: l/s, m³/h, cfm, m/s, fpm

Barometer: 600...1200 hPa

Temperature: -270...1372 °C,
-450...2500°F (Thermocouple
connector type K)

Included -40...400°C, -40...750 °F
(1 thermo couple type K)

Weight: 490g

Measurement uncertainty at 23°C ±5°C:

Differential pressure: ±0,3% read value or
±0,3 Pa (L after zeroing)
±1% read value or
±0,4 Pa (H, after zeroing)

Barometer: ±2,5 hPa

Temperature: ±0,3°C at -10...70°C

With sensor: ±2,5°C (included type K)

(Uncertainty according to GUM (JCGM 100:2008) using a coverage factor of 2, which for a normal distribution corresponds to a probability of 95%. It is important to correct the measurement values with the corrections stated in the calibration certificate to obtain the above uncertainties. Operational in 0...+50°C, non condensing, non moist air, <80%RH, non aggressive gases.)

All models include:

Lithium battery, USB cable, calibration certificate

For full range and technical data see
www.swema.com

External Sensors



SWA 32: 0,1...30 m/s, -20...80°C. **Part.no. 771060**

SWA 32E: with 0,5 m extension. **771100**



HC2A-S: 0...100 %RH, -40...+60°C. **859550**



SWHP 28-HC2: 0...100%RH, -40...+85°C **767561**



SWA 03: 0,05...3,0 m/s +10...+40 °C,
Omnidirectional Air velocity. **764730**



SWA 52 Globe temperature sensor. **765560**

Temperature sensors: -50...+450°C **765530**



Paper machine cylinder temperature
770280

Leakage tester for ducts

771111



SwemaTwin Bluetooth
SwemaMan 8 and
modem
770060, 768300

SwemaTwin Bluetooth
repeater
766681



SWEMA AB
Pepparvägen 27
SE-123 56 Farsta, Sweden

Tel: +46 8 94 00 90
swema@swema.com
www.swema.com