ClimMate/nSens-HT

176 MULTI-FUNCTION INSTRUMENT FOR HUMIDITY/TEMPERATURE MEASUREMENT

Product description

167

ClimMate display & operation unit

Versatile measurement instrument for detection and display of parameters such as air humidity, temperature, absolute pressure, airflow, volumetric flow rate, CO2, water activity and more.

The standard set consists of a nSens-HT humidity-temperature probe and can be optionally extended. The display and operation device disposes of a big colour touch-screen, an intuitive menu structure and an integrated data logger function with 2 million data point storage. The ClimMate device can be connected to a PC by a USB interface and data can be downloaded, displayed and exported with the SmartGraph III software. This instrument is powered by 4 standard AA LR6 alkaline batteries or alternatively with a USB power supply unit.

nSens-HT humidity-temperature probe

An integral component of the system is the digital nSens-HT humidity/temperature probe which works over the whole measurement range with high accuracy and linear response characteristic. The calibration data are stored directly onto the sensor. The verification/calibration is performed by PC using the nSoft-CAL software. These plug-in probes are quickly replaced and the newly calibrated system may be put back into use again quickly, maintaining highest accuracy.



Mobile and precise measurement of relative humidity and temperature



SET CONTAINS:

- 1 carrying case for handheld device and probes
- 1 handheld operation/display device ClimMate
- 1 nSens-HT-ENS probe incl. nLink-UMB adapter
- 1 nSens cable extension 2m
- 1 USB-cable 1.8m
- 4 batteries alkaline LR6 AA, 1,5V
- 2 humidity standards Novasina SAL-SC 33 & 75%RH
- 1 adapter SAL-SC for nSens probes
- 1 short operating manual
- 2 calibration certificates (abs.press / rel.hum. / temp.)
- 1 x SmartGraph III PC software on CD

Characteristics

ClimMate unit

- Colour touch-screen display with cursor
- Data logging capability with 2 million data points storage
- · Climatic calculator
- Integrated absolute pressure sensor
- Various external probes available, e.g. CO2; airflow etc.
- Battery powered or by USB power supply

nSens-HT probe

- · Highest accuracy
- Linear response characteristic
- · Hysteresis free
- Intelligent, digital with calibration data storage
- Plug & Play

Applications

- · Building controls
- · HVAC plants
- Process industry (e.g. chemical, pharmaceutical, semiconductor etc.
- · Paper-/textile industry
- Building/construction maintenance
- · Storages, warehouses
- · Archives, libraries
- Museums
- · Calibration laboratories
- · Test benches

and many more...

information on the back side

°C -20

Technical data

Operation / display unit	ClimMate - multifunction handheld measuring instrument	
Power supply	4 x 1.5VDC alkaline batteries or USB +5V power supply unit	
Power consumption	approx. 400 mW, battery lifetime approx.1 year, configurable Auto-Off	
Display	Graphic display TFT 240 x 320, capacitive touch display	
Dimensions / Weight	External dimensions: W62 x D34 x H170 mm (without probe) Weight: approx. 200 gr	
Measuring parameters	relative humidity; temperature (nSens-HT): accuracy see below abs.press. 800-1100mbar (integrated): accuracy @25°C +/-0.5mbar calculated parameters: mixing ratio; water vapor pressure; dew point temperature, abs. humidity; wet bulb temp.; water activity etc.	
Interfaces	USB for connection to PC / UMB for connection of external probes	
Protection class	IP54	
Operating temperature	0 to 50°C	
Storage temperature	-20 to +80° C	



Probe	nSens-HT-ENS / combined humidity-temperature sensor			
Measurement ranges	Humidity	0 100% RH		
	Temperature	-20 +80°C		
Measurement accuracy	Humidity	15 30°C	typical +/- 0.5% RH	
incl. reproducibility		0 50°C	typical +/- 0.8% RH	
and hysteresis		-20 +80°C	typical +/- 2.5% RH	
	Temperature	0 +70°C	typical +/- 0.1K	
		-20 +80°C	typical +/- 0.2K	
Number of calibration points	Humidity Temperature	13 points over full measurement range 2 points over full measurement range		
Housing material	PVDF black			
Sensor protection	nCap-PS Polyethylene / silver oxide filter protection cap			
Operating temperature	-20 to +80°C			
Storage temperature	-10 to +60° C (non-condensing)			



	nSens-T-NBS / temperature sensor				
Measurement ranges	Temperature	-20 +80°C			
Measurement accuracy	Temperature	0 +70°C	typical +/- 0.1K		
incl. reproducibility		-20 +80°C	typical +/- 0.2K		
and hysteresis					
Number of cal. points	2 points over full measurement range				
Housing material	PVDF black				
Sensor protection	nCap-E protection cap				
Operating temperature	-20 to +80°C				
Storage temperature	-10 to +60° C (non-condensing)				



Other external probes







CO2 / rel. humidity (capacitive) / airflow

Accessories





nSoft-CAL calibration software / humidity generators