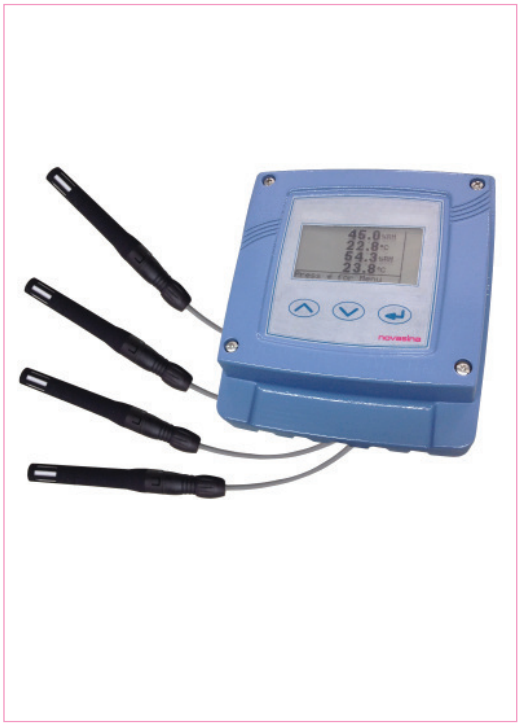
novasina
The Art of Precision Measurement

QuantaDat / nSens



A QUANTUM LEAP IN THE WORLD OF ACCURATE MEASUREMENT

Product description

QuantaDat Transmitter

This modular designed transmitter ,with multi sensor technology, is used as a display and signal output unit with 4 sensor channels and 4 analogue outputs. This allows the management of 4 measurement points by only 1 transmitter. The sensor identification is made automatically and the channels can be assigned and configured using the onboard menu.

The integral climatic processor (Mollier chart) enables display and output of values such as dew point temperature, absolute humidity, specific enthalpy, mixing ratio etc. An RS-485 interface is integrated as standard. Bus interfaces and relay switches can be assembled with modular configuration.

nSens probe

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

°C	°F
80	176
75	167
70	158
65	149
60	140
55	131
50	122
45	113
40	104
35	95
30	86
25	77
20	68
15	59
10	50
5	41
0	32
-5	23
-10	14
-15	5
-20	-4

YOUR ADVANTAGES:

Multisensor technology
Transmitter manages several sensors

Unique measurement accuracy
+/- 0.5% RH and +/- 0.1K

Process optimal measurement technology
for stable & energy saving processes

Ideal measurement characteristics
for linear & hysteresis free control over the whole measurement range

Characteristics

QuantaDat transmitter

- Multisensor-Technology with 4 sensor channels
- 4 configurable analogue output signals
- Integrated climatic parameter processor
- Simulation function for fixed value output
- Graphical display with LED backlight
- Easy configuration by user-friendly device menu
- Simple Installation and set up

nSens probe

- High measuring accuracy
- Linear response
- Digital sensor with calibration data storage
- Software for verification and calibration by PC

Applications

- Clean Rooms
- HVAC plants
- Paper-/textile industry
- Meteorological stations
- Greenhouses
- Ripening chambers
- Combustion- and drying-processes
- Warehouses / storage units
- Calibration labs
- Test benches
- Plant engineering & construction

and many more...

More information on the back side

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Technical Data

Transmitter	**QuantaDat 4 channel multisensor system**
Power supply	24V +/- 15% AC or DC (galvanic isolated)
Power consumption	max. ca.3W
Display	Graphical display with LED backlight, 128 x 64 Pixel
Selectable parameters	Humidity; Temperature; Mixing ratio; Water vapour partial pressure; Dew-point temperature; Specific enthalpy; Absolute humidity
Analogue outputs	4 scalable & adjustable analogue outputs, 0/4..20mA or 0/2..10V
Digital outputs	RS-485 Version with relay: 2 relay contacts, switching power <=50V/2A/60W
Housing material	ABS - lid blue RAL 5014, bottom grey RAL 7035
Protection class	IP54
Operating temperature	0 to 50°C
Storage temperature	-10 to +60° C (non-condensing)
CE-/EMC compatibility	Safety: IEC 61010-1:2010 EMC: IEC 61000-6-2:2005, EN 61000-6-2:2005 IEC 61000-6-3:2006+A1:2010, EN 61000-6-3:2007+A1:2011

Probe for transmitter	**nSens-HT-ENS / Humidity-Temperature probe**		
Measurement range	Humidity	0 ... 100% RH	
	Temperature	-20 ... +80°C	
Measurement accuracy incl. reproducibility and hysteresis	Humidity	15 … 30°C	typical +/- 0.5% RH
		0 … 50°C	typical +/- 0.8% RH
		-20 … +80°C	typical +/- 2.5% RH
	Temperature	0 … +70°C	typical +/- 0.1K
		-20 … +80°C	typical +/- 0.2K
No. of calibration points	Humidity	13 points over whole measurement range	
	Temperature	2 points over whole measurement range	
Housing material	PVDF black		
Sensor protection	nCap-PS polyethylene silver oxide filter		
Operating temperature	-20 to +80°C		
Storage temperature	-10 to +60° C (non-condensing)		

Probe for transmitter	**nSens-T-NBS / Temperature probe**		
Measurement range	Temperature	-20 ... +80°C	
Measurement accuracy incl. reproducibility and hysteresis	Temperature	0 … +70°C	typical +/- 0.1K
		-20 … +80°C	typical +/- 0.2K
No. of calibration points	2 points over whole measurement range		
Housing material	PVDF black		
Sensor protection	nCap-E plastic protection cap		
Operating temperature	-20 to +80°C		
Storage temperature	-10 to +60° C (non-condensing)		

Accessories

nSens-Cable available in various lengths including mounting material

nSoft-CAL PC-calibration software

Further information the "QuantaDat/nSens - Overview Technical Data" document as well as the Novasina general catalogue is available

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