

HIS-Sensor

*Electronic sensor probe to HygroDat 100 - EC
for general applications*



General Information

The Novasina electronic sensor has been developed for HygroDat 100 measuring systems and is available in two versions. The HIA for standard and the HIS for heavier applications in industrial processes.

Thanks to a combined construction of plastic and stainless steel, the reaction time on changing environmental parameters is extremely fast, despite the robust design for heavy duty applications. The measured values are transmitted up to 10 times a second to the transmitter unit.

An analogue electronic unit, which has also been developed by Novasina is integrated in the sensor probe. This electronic does a first signal processing and compensation. Together with the very accurate CC-1 electrolytic measuring cell, the key element of the whole system, and different protection filter caps, this sensor achieves outstanding

humidity measurement results in any industrial process.

The electrolytic sensor technology allows remote measurements up to 100m of distance between sensor probe and transmitter connected by a standard 5-wire installation cable without shield.

The system installation is very simple and cost saving. Furthermore the system impresses with its high electrostatic discharge resistance, which is another advantage.

Each HygroDat 100 system is calibrated at 5 humidity points. The calibration can be performed at any time during the operation using the well-proved Novasina SC Checks. This can be done easily on site without sending back the whole system to the factory.

A simple, cost saving calibration and adjustment method!

Main Features

- Highly precise and fast humidity- and temperature measurement
- Electrolytic humidity measuring cell technology, interchangeable Type: CC-1
- Probe housing made of stainless steel with IP 65 protection
- Robust 20 mm sensor diameter
- Various filter caps for different applications
- Analogue electronic interface for signal converting in the sensor
- Up to 100 m remote mounting of the sensor using a standard 5-wire installation cable without shield
- Airtight duct mounting kit and wall mounting kit for quick sensor fixation
- High resistance against electro magnetic discharges thanks to the high integrated ASIC technology
- Sensor cable can be adapted in length individually on site
- Various sensor shaft lengths available



Electronic sensor HIS :

Electronic sensor HIS / 1,5m cable	HIS-11
Electronic sensor HIS / 10m cable	HIS-12
Electronic sensor HIS / 20m cable	HIS-13
Electronic sensor HIS / up to 100m	HIS-1x

Article No.	1117532
	1117533
	1117534
	1117535

Mounting aid :

Duct mounting flange	1 pcs	1117538
Wall mounting flange	2 pcs	1117588
Installation cable	xx m	111xxxx

Article No.	1117538
	1117588
	111xxxx

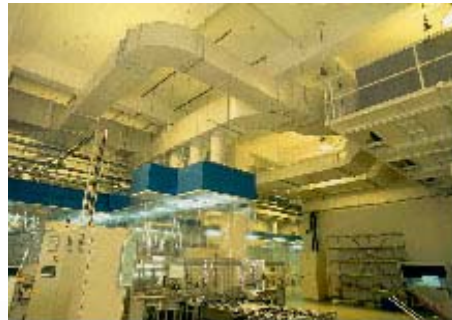
°C -20 -4 °F

Specifications

Type	HIS electronic sensor system
Article No.	1117532 / 1117535
Measurement range : Humidity	6%...100 % RH (protected against saturation)
Measurement range : Temperature	-20 ... +80°C
Basic accuracy : Temperature	+/- 0.1K (0...70 °C)
Basic accuracy : Humidity	+/- 0.5% RH (10...95% RH / 0...50°C)
Basic solution : (RH / T)	0.1% RH / 0.1K
Typical repeatability : (RH / T)	< 0.2% RH / < 0.1K
Operation temp. : Sensor probe	-20 ... +80° C
Power supply	---
Power consumption	Typ. 19 mW (worst case 35.5 mW)
Analogue output signal	Integrated signal processing and compensation
Storage temperature : Sensor probe	0 ... 60° C (not condensing)
Storage temperature : CC-1 cell	0 ... 60° C (not condensing)
Electric connection system	5-wire installation cable up to 100m not shielded !
Electromagnetic compatibility	EN 50081-2 / EN61000-3-2/-3 / EN 50082-1/-2
IP-protection : Sensor probe	IP 65

Accessories:

		Article No.
Electrolytic circuit board cell	CC-1	1113828
Protection cap with "Cellgard"	CS -1 "Cellgard"	111 7323
Protection cap with metal web	TS -1 "Cellgard"	111 7524
Protection cap with metal web	TS -2	111 9597
Protection cap with active carbon	AS -1 "Cellgard"	111 7525
Protection cap with "Redox"	AR -1 "Redox"	111 8965
Sinter filter made of stainless steel	SS -1 "Cellgard"	111 7183
Sinter filter made of stainless steel	SS -2	111 9600
Wall mounting clip kit 1	2 pcs	111 7588
Wall mounting clip kit 2 "clamp flange"	1 pc	111 7992
Duct mounting kit for shaft diameter 20mm	1 pc	111 7538
Weather protection shield for outdoor	1 pc	111 6812
Special flange to weather shield	1 pc	111 8963



Dimensions of the HIA sensor :

