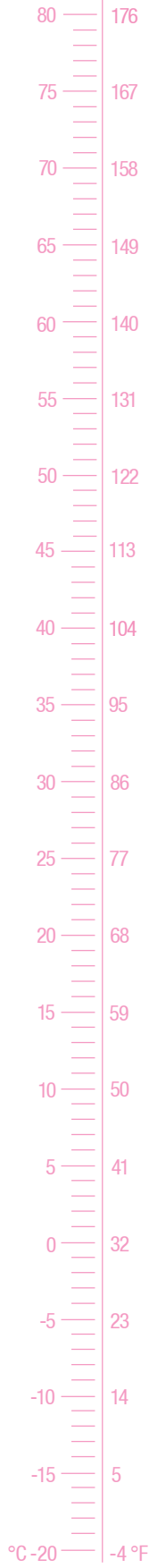


# HygroDat 10/20

For precise humidity and temperature measurement  
in process and HVAC environments



## General Information

With the precision humidity-transmitter Hygrodat 10&20 (without & with display), Novasina has established a standard in the humidity and temperature measurement technology with regard to accuracy and reliability. This technologically superior product fulfills the highest requirements, which are essential for the control of production processes.

The Novasina Hygrodat provides consistently reliable and accurate data outputs. A calibration check is possible to verify its accuracy. The transmitter features a user-friendly, easy calibration function by just pressing button. The electronically-controlled adjustment is performed up to 5 points. The LED lead the user through the whole process.

## Four significant advantages

- A electrolytic sensor together with a special microchip guarantees precise measurement data throughout the entire temperature and humidity ranges.
- A micro-controller ensures easy operation by means of LED indicators. Additionally the micro-controller monitors the instrument constantly during operation.
- The sensor and control box can be mounted independently of each other and can be connected without amplifier over long distances (up to 60 m).
- This technology means that signals are unaffected by power fluctuations and electro-magnetic interferences.

## Main advantages

- Best "online" accuracy of humidity measurement without any hysteresis
- Easy installation, start-up and operation. Service tools and simple intuitive menu operation
- Remote measurement with a distance up to 60m between transmitter and sensor
- Standard analogue outputs for humidity and temperature in voltage and current signals
- Changeable standard units US / International
- Menu driven 5-point calibration 11, 33, 53, 75 and 98% RH
- Many accessories such as filters for cell protection for the industrial process field
- 3 transmitter types for different applications

## Applications

- Industrial HVAC plants
- Cleanroom applications and healthcare (hospitals)
- Paper and, textile-industry
- Meteo- Stations
- Archives, libraries, museums
- Storage rooms
- Greenhouses, agriculture
- Gas turbine controls
- Laboratories, test- and measurement rooms
- Chemical-, pharmaceutical- process controls
- Packaging processes

### HygroDat 10 R/S/M :

Humidity- and temperature transmitter without LCD

### HygroDat 20 R/S/M :

Humidity- and temperature transmitter with LCD

### Transmitter :

HygroDat 10 R	24V DC / 230V AC
HygroDat 10 S	24V DC / 230V AC
HygroDat 10 M	24V DC / 230V AC
HygroDat 20 R	24V DC / 230V AC
HygroDat 20 S	24V DC / 230V AC
HygroDat 20 M	24V DC / 230V AC

### Article No. :

<b>1115311 / 1115314</b>
<b>1115310 / 1115313</b>
<b>1115312 / 1115315</b>
<b>1115317 / 1115320</b>
<b>1115316 / 1115319</b>
<b>1115318 / 1115321</b>

### Sensor armature:

Sensor-Armatur 50 mm	: 1m / 3m : HS-01/03
Sensor-Armatur 100 mm	: 1m / 3m : HS-11/13
Sensor-Armatur 200 mm	: 1m / 3m : HS-21/23
Novasina humidity measurement cell	CC-1

### Article No. :

<b>1114878 / 1114879</b>
<b>1113739 / 1113740</b>
<b>1113741 / 1113742</b>
<b>1113828</b>



M - Type



S - Type



R - Type

## Specifications

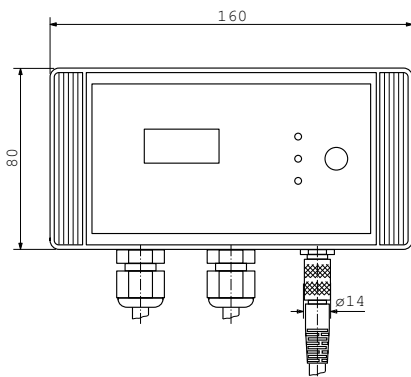
Type	HygroDat 10/20 24VDC	HygroDat 10/20 90...230VAC
Article-Nr.	see front page	see front page
Measuring range : Humidity	6%...100% RH ( electronic protection against saturation )	
Measuring range : Temperature	-20 ... +80°C / -4.....176°F	
Accuracy of : Temperature	+/- 0.5K	
Accuracy of : Humidity	+/- 1.0 % RH ( at 25°C and 5 Point calibration )	
Basic repeatability ( RH / T )	0.1% RH / 0.1K	
Typical repeatability ( RH / T )	0.3% RH / 0.1K	
Operation temperature : Transmitter	-10 ... 50° C / 14 ....140°F	
Operation temperature : Sensor armature	-20 ... 80° C / -4 .... 176°F	
Power supply voltage	9 ... 35V DC	90 ... 260 V AC (50 / 60Hz)
Power consumption	2.0 W DC max.	3.5 VA AC max.
Electromagnetic compatibility	EN 50081-2 / EN61000-3-2/-3 / EN 50082-1/-2	
IP-protection / shock / regulations / vibration	<b>IP 65</b> / IEC 68-2-6 / EN 61010-CE / IEC 68-2-6	
Analoge output signal : voltage	0 ... 10 VDC / 2 .... 10 VDC	( at >= 8kΩ load )
: current	0 ... 20 mA / 4 .... 20 mA	( at <= 500Ω load )
Storage temperature : Transmitter	-10 ... 60° C / 32 ....122°F ( no saturation )	
Storage temperature : Sensor	-20 ... 60° C / -4 ....122°F ( no saturation )	

## Accessoires :

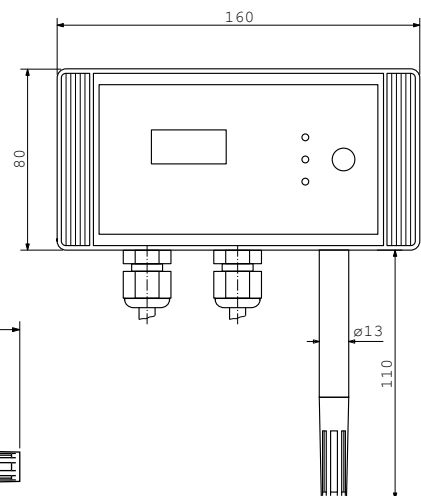
		Article-No.
Metal web filter with cellgard	MF-1	1111018
Metal web filter with active charcoal	AF-1	1113675
Protection cap without filter	CP-1	1114745
Duct mounting flange	1 pc.	1115343
Wall mounting flanges	2 pc.	1117360
Mounting set DIN rails	Set	1107350
Adapter for sensor check SAL-SC		1107345
Sensor armature incl. CC-1 cell	HS-xx	div.
Armature extension tube, polycarbonate		1114632
Sensor checks SAL-SC 11 / 33 / 53 / 75 / 90%RH		div.



Hygrodat 20 M



Hygrodat 20 S



Hygrodat 20 R

