



EMS Brno

Data Acquisition Environment
Hardware – Software – Cloud application
www.emsbrno.cz

Air temperature and humidity sensor EMS 33H

(Serial number starting with „N”)

Main features:

- Replacement of the sensor chip by the customer on site instead of recalibration
- Normalized outputs 0 to 1 V
- Mesh 40 μm PE
- Economy solution
- Manufactured by EMS



Specification:

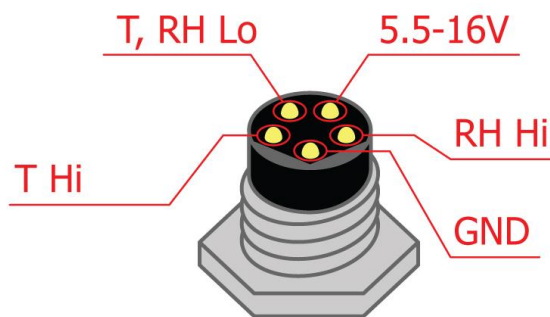
- Temperature:
 - range -40 to 60 °C
 - output sensitivity 10 mV/°C
 - accuracy better than ± 0.2 °C
- Air Humidity
 - range 0 to 100 %
 - output sensitivity 10 mV/%
 - accuracy better than ± 2 %
- Power supplying 5.5 to 16 V; 3 mA
- Warm-up time 1 sec
- Size: $\varnothing 20 \times 92$ mm



Specification

Output	Voltage
Temperature measuring range	-40 to 60 °C
Temperature accuracy	± 0.2 °C in the whole range
Temperature output sensitivity	10 mV/°C
Humidity measuring range	0 to 100%
Humidity accuracy	± 2%
Humidity output sensitivity	10 mV/%
Warm-up time	1 sec
Size (diameter x length)	20 x 92 mm
Weight	26 g
Operating environment temperature	-40 to 80 °C
Operating environment humidity	0 to 100%
Connection	M8 connector male 5-pin

Air temperature and humidity sensor EMS 33H - male connector wiring



Standard M8 female connector cable wiring



Black - 5.5-16V
Grey - GND
Brown - T Hi
Blue - RH Hi
White - T, RH Hi