Temperature / Humidity sensor Galltec KPC active

Compact sensor in a rod-design with plug-in connection

Description

- The temperature humidity sensors are compact sensors in a rod-design with plug-in connection to measure relative humidity and temperature (individually or together) with high precision in air an other non-aggressive gases.
- The delivery includes the coupling plug.
- The relative humidity is measured by a capacitive sensing element and the value will be placed at the output as analog output as well.

Specifications

Type	Temperature Sensor	Humidity Sensor
Measurement principle	Pt100 1/3 DIN acc. DIN EN 60751	Capacitive
Measurement range	-30 ... +70 °C	0 ... 100% RH
Slope (Data Logger Meteo-40)	100	100
Offset (Data Logger Meteo-40)	-30	0
Accuracy		
Accuracy	± 0.2 K (-27 ... +80 °C)	± 2% RH (5 ... 95% RH @ 10 ... 40 °C)
Additional error	± 0.007 K/K (<10 °C, >40 °C)	< 0.1 %/K (<10 °C, >40 °C)
Operating range		
Ambient temperature	-40 ... +80 °C	
Minimum air speed (across sensor)	≥ 0.5 m/s	
Electrical data		
Output signal	0 ... 1 V	
Operating supply	6 ... 30 VDC	

Ammonit Measurement GmbH
measuring wind and solar power

Wrangelstrasse 100, D-10997 Berlin, Germany
+49 30 6003188-0 info@ammonit.com * Web:
www.ammonit.com

PDF created on:
2023-08-03   1

Power consumption	<1 mA
General	
Connection	7-pol plug for shielded cable
Dimensions	155 x Ø 20 mm
Weight	approx. 0.1 kg
Protection Sensor	IP 30
Protection Electronic	IP 65
Protection Coupling	IP 67
Manufacturer	Galltec

Sensor connection diagram

Sensor	Plug Pin No.	Ammonit Cable Wire Colour	Meteo-40 Analog Voltage	Supply Sensor
Temperature Output Voltage	7	white	Ax	
Ground	5	blue	Bx	
Humidity Output Voltage	3	brown	Ax+1	
Ground	2	pink	Bx+1	
Supply	4	red		9 … 30 VDC*
Ground	1	black		Main Ground

*Supply voltage for usage with Meteo-40 data loggers
Cable type: LiYCY 4 x 0.25 mm²
Connect the shield logger-sided to Ground (GND)

Ammonit Measurement GmbH
measuring wind and solar power

Wrangelstrasse 100, D-10997 Berlin, Germany
+49 30 6003188-0 info@ammonit.com * Web:
www.ammonit.com

PDF created on:
2023-08-03

2

Temperature Humidity Sensor KP

Meteo-40 Data Logger

Analog Voltage

Sensor pin		Logger
Temperature	7	A
Ground / Ref.	5	B (Ax)
Humidity	3	A
Ground / Ref.	2	B (Ax+1)
Supply	4	Supply 6 ... 30 VDC
Ground	1	Ground

Cable

Ax

Ax+1

2 mA

7-pole Plug

Shield

Earth (Ground)