



Thermohygrometer (direct output)

Air temperature and RH% sensor. Pt100 output for temperature and 0-1 Vdc output for RH%. For outdoor application it should be coupled with a radiant screen. Precise and reliable, this sensor is suitable for continuous measurements also in severe environments and in presence of steep thermal and hygrometric variations.

Order numb.

DMA672.1

ESU403.1

Output	RH%: 0÷1 Vdc. °C: Pt100 DIN-IEC 751 table (EN 60751)	
Power supply	6÷18 Vdc	
Connector	L = 3 m free wires (8 wires)	L = 3 m and n.2 Mini-Din connectors
Data logger compatibility	M-Log (ELO007-008) R-Log (ELR515), E-Log (all models)	M-Log (ELO009) R-Log (ELR510)

Common features

Temperature	<i>Principle</i>	Pt100 1/3 DIN B
	<i>Measuring range</i>	Depending by the data acquisition system
	<i>Uncertainty</i>	0,1°C (0°C)
	<i>Output</i>	Pt100 DIN-IEC 751 table (EN 60751)
	<i>Resolution</i>	0,01°C (M/R/E-Log)
	<i>Response time (T90)</i>	3 min: with filter; 20 sec: without filter (0,2 m/s air speed)
Relative humidity	<i>Principle</i>	Capacitive
	<i>Measuring range</i>	0÷100%
	<i>Uncertainty</i>	±1,5% RH (5-95%)
	<i>Output</i>	0÷1 Vdc
	<i>Response time (T90)</i>	10 min. with filter; 1 min. without filter (0,2 m/s air speed)
General information	<i>Cable</i>	L = 3 m
	<i>Protection type</i>	IP54
	<i>Operative temperature</i>	-40÷+80°C

Accessories

Order numb.

	DYA230	Multi plate natural ventilation radiant screen
	DYA233	Multi plate natural ventilation radiant screen for DYA046 arm
	DYA231	Multi plate forced ventilation radiant screen. 12 Vdc power supply
	DPA232	Multi plate forced ventilation radiant screen. 24 Vac power supply
	DZC301.S	Temperature and RH% calibration certificate. ISO9000 type
	CSIT.T10	Temperature calibration certificate ACCREDIA type
	DZZSIT8	RH% calibration certificate ACCREDIA type
	DYA049	Mast-mounting device for ø 45-65 mm pipe



Thermo hygrometer (analog, RS485 output)

Instruments for accurate measurement of air temperature and relative humidity in severe outdoor environments.

On models DMA980-975-875, an high efficiency natural ventilation radiant screen (with special black painting on the lower surface of the plates) ensures that the sensing element is protected by sun rays for accurate air temperature readings. For even better results in low wind and high solar radiation conditions, models DMA867 are equipped with a forced ventilation screen. DMA980 model measures Temperature and Relative Humidity and Barometric Pressure. Output of the models DMA980-975 is RS485 using Modbus RTU® or TTY-ASCII protocols.

Order numb.	DMA980 (1)	DMA975 (1)	DMA875 (1)	DMA867 (2)
Measurements	°C/RH%/hPa	°C/RH%		
Programmable hydrometric output	RH% or dew point			
Output	RS485	2x0/4÷20 mA		
Protocol	Modbus RTU®, TTY-ASCII	-	-	-
Programmable output	Instant, max., min., ave. (1÷3600 s)	-	-	-
Configuration	Hyperterminal	-	-	-
RS485 protection	Galvanic insulation (3 kV, UL1577)	-	-	-
RS485 speed	1200÷115 kbps	-	-	-
hPa measurement range	800÷1100 hPa	-	-	-
hPa uncertainty	0,5 hPa	-	-	-
hPa thermal drift	0,25hPa/10°C	-	-	-
Power consumption		1 W		3 W
Ventilation		Natural		Forced

Common features

Temperature	<i>Principle</i>	Pt100 1/3 DIN B
	<i>Programmable measuring range</i>	-30÷70°C, -50÷50°C, -50÷100°C,
	<i>Uncertainty</i>	0,2°C (@ 0°C)
	<i>Resolution</i>	0,04°C
	<i>Response time (T90)</i>	20 s
Relative humidity	<i>Principle</i>	Capacitive
	<i>Measuring range</i>	0-100%
	<i>Uncertainty</i>	±1,5% RH (@5-95%)
	<i>Response time (T90)</i>	1 min
General information	<i>Power supply</i>	10÷30 Vac/Vdc
	<i>Connector</i>	7 pin IP65 watertight connector
	<i>Protection type</i>	IP65
	<i>Electric protections</i>	Tranzorb and Emifilter
	<i>Operative temperature</i>	-40÷80°C

Accessories

Order numb.

DZC301.S	Calibration certificate
DYA049	Mast-mounting device for ø 45-65mm pipe
DWA510	Cable L = 10 m
DWA525	Cable L = 25 m
DWA526	Cable L = 50 m
DWA527	Cable L = 100 m
MG2251	7 pin free female connector
ML3015	Sensitive element (spare part)



Thank you for reading this data sheet.

For pricing or for further information, please contact us at our UK Office, using the details below.



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Please note - Product designs and specifications are subject to change without notice. The user is responsible for determining the suitability of this product.