

AIR TEMPERATURE RELATIVE HUMIDITY Thermo-Hygrometer (Radio output)



- ▶ Radio output
- ▶ Replaceable sensitive element
- ▶ Programmable air temperature measurement range

Instrument for accurate measurement of air temperature and relative humidity in severe outdoor environments. A high efficiency natural ventilation radiant screen ensures that the sensing element is protected by sun rays for accurate air temperature readings. EXP815 sensor is equipped with an internal radio to send measurements up to 600 m far to data logger equipped with radio receiver.

Technical Specifications

PN	EXP815
Measurements	- Air temperature - Relative Humidity
Output	Radio
Frequency	868 MHz
Radio transmission power	25 ± 3 mW
Radio transmission distance (line-of-sight)	600 m
Transmission rate	10'
Battery life	>2 years
Power supply	Battery (AA 3.6 V)
Power consumption	<10 µW stand-by; 120 mW in transmission
Electric protections	NO (electrically insulated system)
Ventilation	Natural

Temperature	Principle	RTD Pt100 1/3 DIN (Class AA EN60751)
	Output	Pt100 DIN-IEC 751 table (EN 60751)
	Measuring range	Programmable: -40...60 °C, -50...60 °C, -50...70 °C, -30...100 °C
	Accuracy	0.1 °C (@ 0 °C)
	Resolution	0.01 °C
	Response time (T90)	Typical 4 s (1 m/s air flow)
	Long term stability	<0.1 °C/year
Relative Humidity	Principle	Capacitive
	Output	Programmable: RH% or Dew Point
	Measuring range	0...100%
	Accuracy	±1% (@ 5...95%)
	Resolution	0.1%
	Long term stability	<±1% / year
	Response time (T90)	Typical 10 s (1 m/s air flow)
General Information	Hysteresis	<1%
	Protection type	IP66
	Temperature	-40...80 °C

Accessories

	SVICA0003	Calibration Report (ISO 9001 Temperature)
	SVACA0006	Calibration Certificate ISO/IEC 17025-ACCREDIA (Temperature)
	SVICA1003	Calibration Report ISO 9001 (RH%)
	SVACA1005.1	Calibration Certificate ISO/IEC 17025-ACCREDIA (RH%)
	DYA049	Mast-mounting device for Ø 45...65 mm pipe
	ML3007	Sensitive element (spare part) for EXP815, DMA975-875-867
	EXP301	Radio signal receiver from EXP815 radio sensor Output compatible with data loggers (M/E-Log) • Maximum number of receivable sensors: 200 • Battery: NiCd 9 V • Power supply: 12 V DC • Connection cable to data logger: DWA601