

TEMP./HUMIDITY TRANSMITTERS

HD 9008TR



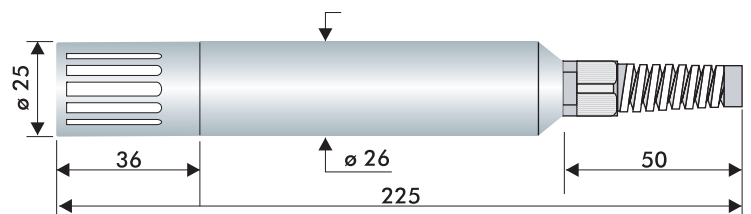
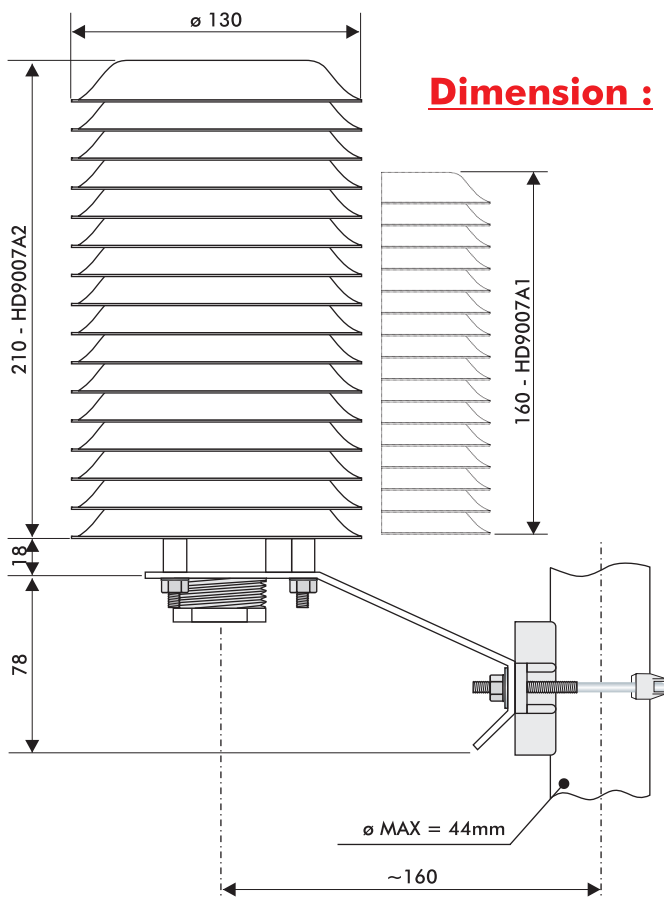
The HD 9008TR and HD 9008TR are single block RH and Temperature microprocessor transmitters, temperature configurable. The HD 9008TR is a passive transmitter with a 4....20mA output and 7....30Vdc power supply; the HD9009TR is a transmitter with a 0....1V standard voltage output (other outputs available on demand) and 7....30Vdc power supply. Sensors are mounted at the end of a plastic tube: a capacitive humidity sensor and a Platinum temperature sensor ($100\Omega @ 0^{\circ}\text{C}$).

The instrument can be reprogrammed by means of a key, and no jumper or potentiometer actions are required. The humidity input can be re-calibrated by using two saturated solutions: the first one at 75%, the second one at 33%; the 0%RH...100%RH relative humidity range is fixed, 4mA (or 0Vdc) correspond to 0%RH, 20mA (or 1Vdc) equal 100%RH.

Temperature standard configuration is $-40...+80^{\circ}\text{C}$ for the HD9008TR and $-40...+60^{\circ}\text{C}$ for the HD90009TR, corresponding to 4...20mA and 0....1Vdc, respectively.

The user can configure the temp. output in ranges different from the standard one by means of a Pt100 simulator or of a set of fixed resistances, provided that it is included in the $-40^{\circ}\text{C}....+80^{\circ}\text{C}$ range with a minimum amplitude of 25°C . Two LEDs give alarm indications (temp. exceeding set range, sensor breakage or short-circuit) & help the operator when programming.

Important Warning: probes work in the $-40^{\circ}\text{C}....+90^{\circ}\text{C}$ temp. range. Outside this range data are not correct; electronics is designed to operate in this range.





HD 9007 MULTIPLATE RADIATION SHIELD

Characteristics :

Luran S777K (BASF) antistatic UV-resistant thermoplastic material with low thermal conductivity and high reflection.

White power-painted anticorodal aluminum support bracket. Stainless steel U-bar mounting bracket for shafts from 25 to 44mm.

Dimensions : external \varnothing : 130 mm.

Height, excluding bracket : HD 9007 A1 : 190 mm, Weight : 640 gr.

HD 9007 A2 : 240 mm, weight : 760 gr.

Sensor fixing ring nuts : \varnothing 27mm, \varnothing 25 mm on demand when ordering.

HD 9007 ring-shield is suitable to protect temperature and RH/temperature sensors used in weather stations used in weather stations from from solar radiations, rain and wind.

TECHNICAL DATA		HD 9008TR	HD 9009TR
Electronics Working Temp.		-40...+80°C	
Sensor Working Temp.		-40....+80°C	
Transmitter Power Supply		7...30Vdc	7...30Vdc
Capacity		300 pF typ.	
HUMIDITY	Measuring Range	5.....98%RH	
	Accuracy at 20°C	$\pm 2\%$ RH (5....90%RH) $\pm 2.5\%$ RH (for the remaining range values)	
	Response time at 63% of final Variation	3 min. with filter; 6s without filter	
	Output Signal	0%RH = 4.0mA 100%RH = 20.0mA	0%RH = 0.00 Vdc 100%RH = 1.00 Vdc (*)
	Load Resistance	$R_{Lmax} = \frac{(Vdc - 7)}{22mA}$	$R_{inMIN} = 10 K\Omega$
TEMPERATURE	Measuring Range - Standard Configuration - (**)	-40....+80°C	-40....+80°C
	Accuracy	$\pm 0.1^\circ C \pm 0.1\%$ of measurement	
	Response time at 63% of final Variation	60s with filter; 5s without filter	
	Output Signal	-40°C = 4.0mA +80°C = 20.0mA	-40°C = 0.00 Vdc +80°C = 1.00 Vdc (*)
	Load Resistance	$R_{Lmax} = \frac{(Vdc - 7)}{22mA}$	$R_{inMIN} = 10 K\Omega$
Dimensions		$\varnothing 26 \times 225$ mm	
Maximum Length (***)		200m	10m
Wire Min. Section		20 AWG - 0.5mm ²	20 AWG - 0.5mm ²
Cable Max. Diameter		$\varnothing 5$ mm	$\varnothing 5$ mm

ORDER CODES :

HD9008TR : Dual passive RH and Temp. microprocessor transmitter 4...20mA outputs in 0....10%RH & -40...+60°C range.

HD9009TR : Dual RH and Temp. microprocessor transmitter. 0...1V output in 0...100% & -40....+60°C ranges.

HD9007 A1 : 12-ring protection L = 190 mm complete with mounting brackets.

HD9007 A2 : 16-ring protection L = 240 mm complete with mounting brackets.

HD9008.21.1 : Holder for vertical sensor, wall distance 250mm, hole \varnothing 26.

HD9008.21.2 : Holder for vertical sensor, wall distance 125mm, hole \varnothing 26.



HTA INSTRUMENTATION (P) LTD.,

An ISO 9001: 2015 Certified Company & NABL Accredited Calibration Laboratory as per ISO/IEC 17025:2017

Your One Stop For Instrumentation Supply, Automation & Calibration

73, Ramachandra Agrahara, Near T.R. Mills, Chamarajpet, Bangalore - 560018, INDIA.

Phone : 080-26749750, 26759253, 26740681 E-mail : sales@htaipl.com Website : www.htaipl.com

