

INDOOR ENVIRONMENTAL MONITORING

with Communication Interface

Measuring Parameters

- Temperature
- Humidity
- Barometric Pressure
- Air Velocity

The models are provided with RS232C or RS485 serial output and the management of more than one device connected to a network. In addition, all the models are fitted with an open collector type low-activated configurable alarm output.

The HD2001.1 and HD2001.3 model have three configurable analog outputs: 4...20mA or 0...20mA current output, or 0...10Vdc or 2...10Vdc voltage output. The choice of output type is made by means of the jumpers set on the board.

Wind speed measurement is detected by the HD2001.2 model with a hot-wire probe set on the upper part of the instrument.

The large display with dual indication on all models allows one of the process variables on the first line and the temperature on the second line, to be displayed.

Tables 1 and 4 show the main characteristics of the three models.

HD 2001.1 & HD 2001.2



Table - 1

Model	Input			Output	
	Temp. %RH	Pressure	Air Speed	RS232-RS485 Open collector output	Analog outputs 0...20mA, 0...10Vdc, 4...20mA, 2...10Vdc
HD 2001	*	*	---	*	---
HD 2001.1	*	*	---	*	*
HD 2001.2	*	*	*	*	---
HD 2001.3	*	---	---	*	*

Table - 2

HD2001.1 and HD2001.3 Inputs / analog ratio	HD2001.3 analog outputs
Inputs	Analog outputs
-20.... + 80°C	4....20mA
0.... 100% RH	0....20mA
600..... 1100 mbar	0....10Vdc
	2.....10Vdc

Table 4 - Technical information (@ 24Vac and 25°C)

		HD2001	HD2001.1	HD2001.2	HD2001.3
Inputs					
Temperature	Sensor	NTC 10kW			
	Working range	-20...+ 80°C			
	Accuracy	± 0.3°C in the range 0...+ 70°C ± 0.4°C outside this range			
Humidity	Sensor capacity	300pF			
	%RH working range	5...98%RH			
	TD working range	-20.... + 80°C			
	Accuracy	± 2.5%RH			
Pressure	Working range	600...1100mbar-600...1100hPa-60.0... 110.0kPa			---
	Accuracy	± 0.5mbar @ 25°C			---
	Fluid contacting the membrane	Air-Non corrosive gas - No liquids			---
Wind speed	Type of sensor	---	---	Hot-wire	---
	Working range	---	---	0...5m/s	---
	°C working range	---	---	-20...+ 80°C	---
	Accuracy	---	---	± 0.1m/s @25°C	---
Outputs					
Communications	Type	RS232C and Multidrop RS485			
	Maximum Baud Rate	9600 baud			
Alarm	Type of output	Open collector (low-activated)			
	Maximum voltage	30Vdc			
	Maximum power	200mW			
Variable		Temperature, %RH, dew point TD, barometric pressure, pressure drop.		Temperature %RH, dew point TD, barometric pressure, pressure drop and wind speed	Temperature, %RH, dew point TD
Analog	Type of outputs	---	4...20mA 0...20mA 0...10Vdc 2...10Vdc	---	4...20mA 0...20mA 0...10Vdc 2...10Vdc
	Load resistance	---	Current output: 500W max Voltage output: 100kW min	---	Current output: 500W max Voltage output: 100kW min
	Resolution	---	16 bit	---	16 bit
Power		24Vac ± 10% 50...60Hz (230Vac ± 10% on request)			
Software		DeltaMet8			
Environmental Conditions	Temperature range	-20.... + 80° C			
	Humidity range	0...90%RH - (without condensation)			
	Protection degree	Electronic IP67			

ORDER CODE :

HD2001 : Temp., relative humidity, barometric pressure indicator. Open collector alarm output & RS232C & RS485 PC connection. DeltaMet8 software for PC connection.

HD2001.1 : Active indicator/transmitter of temp. range, relative humidity, barometric pressure with selectable 0...20mA, 4...20mA, 0...10V e 2...10V outputs. Open collector alarm output & RS232C & RS485 PC connection. DeltaMet8 software for PC connection.

HD2001.2 : Temp. range, relative humidity, barometric pressure & wind speed indicator. Open collector alarm output & RS232C & RS485 PC connection. DeltaMet8 software for PC connection.

HD2001.3 : Temp., relative humidity active indicator/transmitter with selectable 0...20mA, 4...20mA, 0...10V & 2...10V outputs. Open collector alarm output & RS232C & RS485 PC connection. DeltaMet8 software for PC connection.

HD2001.2.30 : Wall mounting support for HD2001.2.