

# HumiTrans 620

The humidity and temperature transmitter HumiTrans 620 is the most powerful transmitter of Leyro.

This equipment allows to measure multiple parameters of any hygroscopic measurement as well as to work in a temperature range of up to 180°C.

The LE1800 high quality capacitive sensor ensures excellent stability in any type of application.

The HumiTrans 620 transmitter is presented with a single configuration but with great possibilities and applications thanks to the great potential of its software.

The equipment is presented in a wall version with an elongation cable of 2 meters for the most demanding applications. It is designed to work in a temperature range of -80 ... 200°C.

The unit has 2 analog outputs of humidity and temperature, configurable in voltage and current. It also has RS232 communications. The equipment is optionally supplied with a local indicator.

The HumiTrans 620 has 2 buttons on the base plate to perform the loop calibration at two humidity and temperature points, as recommended by the FDA (American Food and Drug Administration).

#### **APPLICATIONS**

Greenhouses & Farmers
Warehouses
Swimming pool & Sport
Centers
House Automation
Meteorologic Stations
Museums
Libraries

#### **HIGHLIGHTS**

Measure 0...100% hr Accuraty 2% saturable Traceable calibration Working range -40°C...80°C Excellent long-term stability

# **Technical Data**

RH:

Recommended work range 0...100% rh
Accuracy at 20°C ±1.5% rh

Temperature deviation Typical. ±0.005% rh/°C

Response time < 15 seg.

Traceable by international ENAC, NIST, PTB

standards

Temperature
Sensor Pt1000 (Class A, DIN EN 60751)

Analog output 0-1 V -1 mA < IL < 1 mA 
0-10 V -1 mA < IL < 1 mA 
-20 mA (two wires) RL < 500 Ohm 
4-20 mA (two wires) RL < 500 Ohm

Accuracy at 20°C ±0.15°C
Temperature range ±0..180°C
-40...180°C

Configurable measure parameters

Humidity Rh 0... 100 % Temperature T -40... 180 °C Temperature of dew point Td -40... 100 °C Temperature of freezing point Th -40... 0 °C Water vapor density Ta 0... 100°C 0... 1100 mbar Water vapor pressure 0... 999 g/Kg Mixing ratio dv 0... 700 g/m3 Water vapor density 0... 2800 kJ/Kg Enthalpy



#### **General Data**

Power Supply 8 – 35 Vcc ó 12 – 30Vca

Consumption 2 x current output, 24Vcc/ca: Typical < 80mA

2 x voltage output: Typical < 40mA

Electrical Connections Terminal with clamping screws, 1.5 mm<sup>2</sup> max.

Housing/Protection degree PC fire-proof class / IP65

Cable gland M16 x 1.5

Sensor Protection Membrane filter, sintered steel, teflon

Working temperature sensor -40...80°C

Electromagnetic Compatibility EN1326-1, ICES-003 Clase B, EN61326-2-3

Software requirements Windows 2000 or higher / serial port

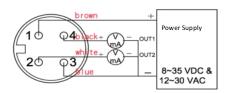
Storage and Working temperature -40...60°C

-25...50°C (with indicator)

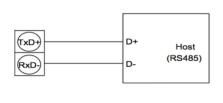
## **Dimension**

### 13.5mm 80mm M12\*1 (signal connector) 24mm M12\*1 Signal M12\*1.5 (RS485 gland wire) 242.1mm M12\*1.5 (RS485 gland wire) Metal connector R1/2" length at customer's request Metal connector 24mm 259.52mm Ø12mm Metal connector R1/2" Ø12mm

## **Electrical Connections**



# **Modbus Communication**



Orders			
Model	Output	Parametrizable Output	Sensor Protection
Humitrans 620 HT Conduit and remote	0 – 5V (T1) 0 - 10V (T2) 0 – 20mA (C1) 4 - 20mA (C2)	Relative Humidity (RH) Temperature of dew point (DPT) Temperature of freezing point (FPT) Water vapor density (Ta) Water vapor pressure (e) Water vapor density (dv) Mixing ratio (r) Enthalpy (h)	Membrane filter (M) Sintered steel filter (S) Teflon filter (T)
Output signal scaling	Local Indication	Options	
Humedity 0100%h Temperature -40180°C Others (Rxx)	Yes (IL) No (xx)	Calibration set PC housing for local indication	