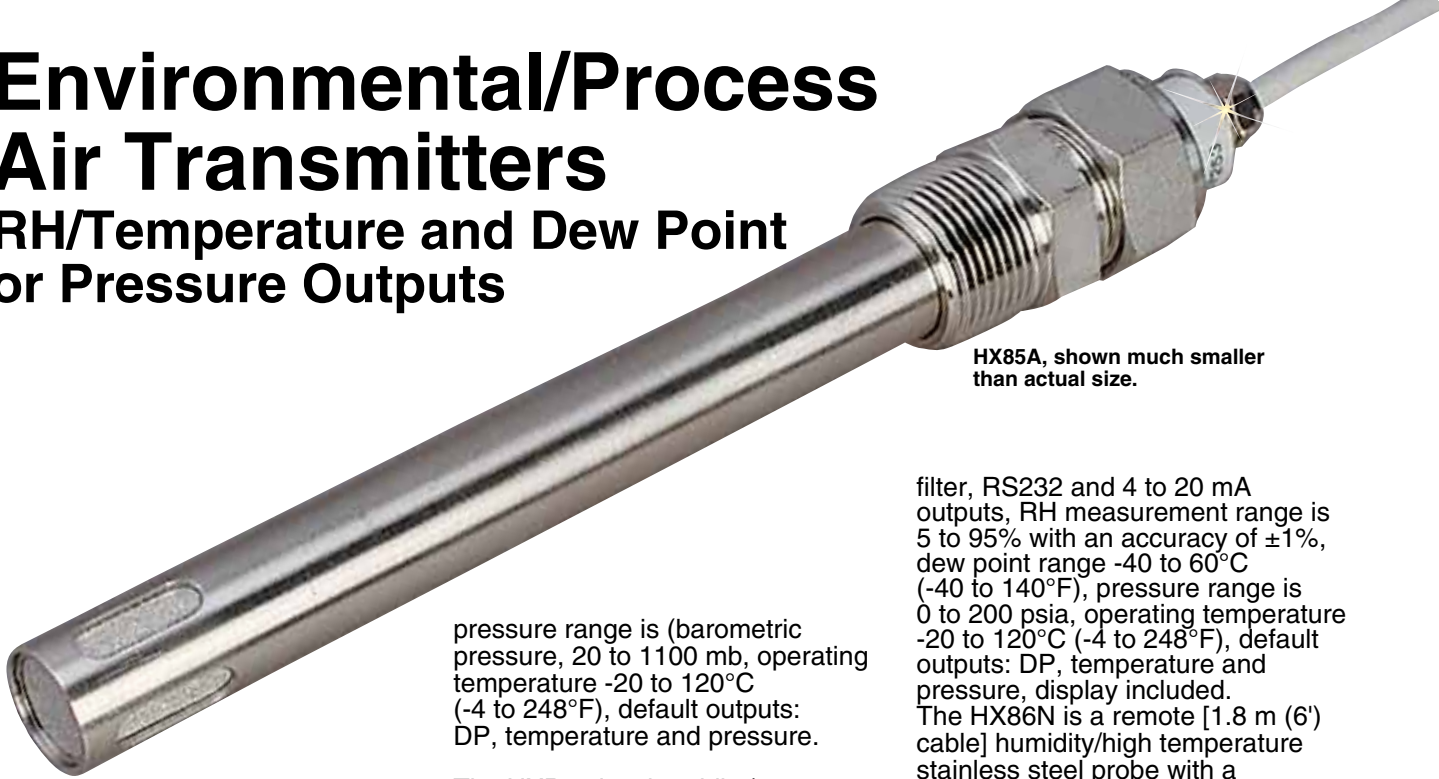


Environmental/Process Air Transmitters

RH/Temperature and Dew Point or Pressure Outputs



HX85A, shown much smaller than actual size.

HX80 Series



HX80 Series is a family of humidity probes that offers a variety of measurement parameters with precision accuracy: RH, temperature, dew point, pressure (psia), ppmv, ppmw, gr/lbs, etc. The probe is easily adaptable for most applications including high temperature and high pressure conditions.

The HX85A is a humidity/temperature stainless steel probe with a stainless steel sinter filter, RS232 and 0 to 10 Vdc outputs, RH measurement range is 5 to 95% with an accuracy of $\pm 1\%$, operating temperature -20 to 120°C (-4 to 248°F), dew point range -40 to 60°C (-40 to 140°F), default outputs: RH, temperature and dew point.

The HX85BA is a humidity/temperature/barometric pressure stainless steel probe with a stainless steel sinter filter, RS232 and 0 to 10 Vdc outputs, RH measurement range is 5 to 95% with an accuracy of $\pm 1\%$, dew point range -40 to 60°C (-40 to 140°F),

pressure range is (barometric pressure, 20 to 1100 mb, operating temperature -20 to 120°C (-4 to 248°F), default outputs: DP, temperature and pressure.

The HXP85 is a humidity/temperature/high pressure stainless steel probe with a stainless steel sinter filter, RS232 and 0 to 10 Vdc outputs, RH measurement range is 5 to 95% with an accuracy of $\pm 1\%$, dew point range -40 to 60°C (-40 to 140°F), pressure range is 0 to 200 psia, operating temperature -20 to 120°C (-4 to 248°F), default outputs: DP, temperature and pressure.

The HX86 is a remote [1.8 m (6') cable] humidity/high temperature stainless steel probe with a stainless steel sinter filter, RS232 and 4 to 20 mA outputs, RH measurement range is 5 to 95% with an accuracy of $\pm 1\%$, dew point range -40 to 60°C (-40 to 140°F), operating temperature -20 to 120°C (-4 to 248°F), default outputs: RH, temperature and dew point, display included.

HXB86 is a remote [1.8 m (6') cable] humidity/high temperature/barometric pressure stainless steel probe with a stainless steel sinter filter, RS232 and 4 to 20 mA outputs, RH measurement range is 5 to 95% with an accuracy of $\pm 1\%$, dew point range -40 to 60°C (-40 to 140°F), pressure range is (barometric pressure, 20 to 1100 mb, operating temperature -20 to 120°C (-4 to 248°F), default outputs: DP, temperature and pressure, display included.

HXP86 is a remote [1.8 m (6') cable] humidity/high temperature/pressure stainless steel probe with a stainless steel sinter

filter, RS232 and 4 to 20 mA outputs, RH measurement range is 5 to 95% with an accuracy of $\pm 1\%$, dew point range -40 to 60°C (-40 to 140°F), pressure range is 0 to 200 psia, operating temperature -20 to 120°C (-4 to 248°F), default outputs: DP, temperature and pressure, display included. The HX86N is a remote [1.8 m (6') cable] humidity/high temperature stainless steel probe with a stainless steel sinter filter, RS232 and 0 to 10 Vdc outputs, RH measurement range is 5 to 95% with an accuracy of $\pm 1\%$, dew point range -40 to 60°C (-40 to 140°F), operating temperature -20 to 120°C (-4 to 248°F), default outputs: RH, temperature and DP.

Common Specifications

RH Accuracy: $\pm 1\%$ RH

Temp Accuracy: $\pm 0.5^{\circ}\text{C}$

Electrical Outputs

0 to 10 Vdc (x3) @ 10 mA max

Temp Measurement Range:

-20 to 120°C (-4 to 248°F)

RH Measurement Range: 5 to 95%

Dew Point: -40 to 60°C (-40 to 140°F)

Serial Output (All Units):

RS232C to DTE device, 19.2 kilobaud, 8 bits data, 1 stop bit, no parity; RS232C (bi-directional)

Power Requirements: 18 to 30 Vdc unregulated, 50 mA max

Dimensions:

Sensor: 19 x 203 mm ($\frac{3}{4}$ x 8")

Cable Length: 1.8 m (6'); consult factory for longer lengths

Electronics Module

Outside Dimensions:

13 H x 9.4 W x 5.6 cm D
(5.1 x 3.7 x 2.2")

Mounting Centers: 11.5 x 7.9 cm
(4.53 x 3.11")

Sensor Pressure Rating: 200 psia max

Sensor Sintered Filter: 40 microns

Material: Stainless steel

HX85A (Sensor Only)

Measured Parameters: RH/temp

Output Information: RH, temp, DP

Electrical Outputs: 0 to 10 Vdc (x3)

HX85BA (Sensor Only)

Measured Parameters: RH/temp/
barometric pressure

Pressure Measurement Range:
10 to 1100 mb

Pressure Accuracy: ±5 mb

Output Information: RH, temp, pressure

Electrical Outputs: 0 to 10 Vdc (x3)

HX85PA (Sensor Only)

Measured Parameters: RH/temp/
high pressure

Pressure Measurement Range:
0 to 200 psia

Pressure Accuracy: ±0.75 psi

Output Information: RH, temp, pressure

Electrical Outputs:
0 to 10 Vdc (x3)

HX86A (Sensor with Electronics Module)

Measured Parameters: RH/high temp

Output Information: RH, temp, DP

Electrical Outputs: 4 to 20 mA (x3)

Alarm Relays: (x2)

Digital Display: LCD, 2-line

HX86PA (Sensor with Electronics Module)

Measured Parameters: RH/high temp/
absolute pressure

Pressure Measurement Range:
0 to 200 psia

Pressure Accuracy: ±0.75 psi

Output Information: RH, temp, pressure

Electrical Outputs: 4 to 20 mA (x3)

Alarm Relays: (x2)

HXB86BA (Sensor with Electronics Module)

Measured Parameters: RH/high temp/
barometric pressure

Pressure Measurement Range:
10 to 1100 mb

Pressure Accuracy: ±5 mb

Output Information: RH, temp, pressure

Electrical Outputs: 4 to 20 mA (x3)

Alarm Relays: (x2)

Digital Display: LCD, 2-line

HX86N (Sensor Only)

Measured Parameters:
RH/high temp

Output Information: RH, temp, DP

Electrical Outputs: 0 to 10 Vdc (x3)



To Order visit omega.com/hx85 for Pricing and Details

Model No.	Description
HX85A	RH/DP/temp transmitter, 0 to 10 Vdc outputs, RS232 (bi-directional)
HX85BA	RH/temp/bar transmitter, 0 to 10 Vdc outputs, RS232 (bi-directional)
HX85PA	RH/temp/press transmitter, 0 to 10 Vdc outputs, RS232 (bi-directional)
HX86A	RH/DP/high temp transmitter with remote display, two alarms, process outputs, RS232
HX86PA	RH/press/high temp transmitter with remote display, two alarms, process outputs, RS232
HX86BA	RH/barometric pressure/high temp transmitter with remote display, two alarms, process outputs, RS232
HX86N	RH/DP/high temp transmitter, 0 to 10 Vdc outputs
HX80-DIS	Remote display, two alarms, process outputs
PSU-93	Unregulated power supply, 16 to 23 Vdc, 300 mA max, screw terminal
PSR-24S	Regulated power supply, US plug, 90 to 264 Vac input, 24 Vdc output, 400 mA, screw terminals, UL
PSR-24L	Regulated power supply, US plug, 90 to 264 Vac input, 24 Vdc output, 400 mA, stripped leads, UL
PSR-24L-230	Regulated power supply, European plug, 230 Vac input, 24 Vdc output, 400 mA, stripped leads, CE
HX80B-SENSOR	Replacement sensor modules for HX85BA
HX80P-SENSOR	Replacement sensor modules for HX85PA

Comes complete with operator's manual and NIST certificate.

Ordering Examples: **HXP85PA**, RH/temp and pressure transmitter with 0 to 10 Vdc outputs, and **PSU-93**, unregulated power supply, 16 to 23 Vdc, 300 mA max, screw terminal.

HX86PA, RH/high temp and pressure transmitter with 4 to 20 mA outputs, and **PSU-93**, unregulated power supply, 16 to 23 Vdc, 300 mA max, screw terminal.