RH/Temp Humidity Transmitters
Wall, Duct Mount, and Remote Probe Models
With Optional Dual Built-In Displays

HX93AC
(without displays)

1 YEAR WARRANTY **NIST** C E
Optional†

HX93AC wall mount.

✔ **4 to 20 mA or 0 to 1 Vdc Output for Both RH and Temperature**
✔ **Splashproof Enclosure**
✔ **Accurate to 2.5% RH and 0.6°C**
✔ **New Models with Built-In Display to Indicate Humidity and Temperature**
✔ **Duct Mount Kit Included with Duct Mount and Remote Probe Models**

The HX93DA and HX93A Series transmitters provide remote and on-site monitoring of relative humidity and temperature. Both series output a linearized current or voltage signal proportional to the measured humidity or temperature. RH outputs are temperature compensated. Current output models enable placing of the transmitter at a remote location virtually any distance away from the measuring device. The HX93DA models feature built-in dual displays that indicate both humidity and temperature simultaneously. All use a thin-film polymer capacitor to sense relative humidity and a Platinum 100 Ω RTD to sense temperature. A stainless steel mesh type filter, easily removable for cleaning, protects the sensors. Mounting screws are easily accessible inside the rugged, polycarbonate enclosure which houses and protects the electronics to NEMA 13 specifications.

† *Refer to ordering chart on next page for NIST calibration ordering information.*

Relative Humidity Control System
The HX93A and HX93DA Series interface directly with iSeries meters and controllers to create a complete relative humidity control system.
iSeries meters and controllers feature totally programmable color displays and embedded internet connectivity. Visit newportUS.com
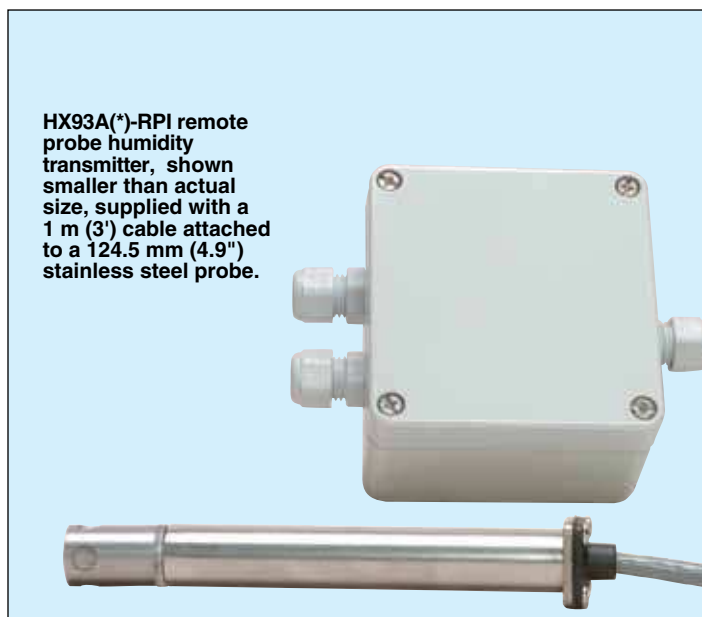

DPi32 ¹⁄₃₂ DIN temperature/process meter, shown actual size.

HX93AC-D duct mount, shown smaller than actual size.

✔ **Rugged Industrial Splashproof Design**
✔ **"Humidity Only" Models Also Available, see page Hu-17 for HX92A Series**

HX93A(*)-RPI remote probe humidity transmitter, shown smaller than actual size, supplied with a 1 m (3') cable attached to a 124.5 mm (4.9") stainless steel probe.

HX93DAC, shown smaller than actual size.

Displays Humidity and Temperature Simultaneously!

Specifications
Input Voltage Range: 24 Vdc nominal
HX93A Series: 6 to 30 Vdc
HX93DA Series: 12 to 30 Vdc

Measuring Range
RH: 3 to 95%
Temperature: -20 to 75°C (-4 to 167°F)

Accuracy
RH: ±2.5% RH from 20 to 80%RH; ±3.1% RH below 20 and above 80% RH@ 25°C (76°F) with temp coefficient of ±0.1% RH/°F
Temperature: 0.6°C (±1°F)

Output
HX93AC or HX93DAC:
4 to 20 mA for 0 to 100% RH and -20 to 75°C (-4 to 167°F)
HX93AV: 0 to 1 Vdc for 0 to 100% RH and -20 to 75°C (-4 to 167°F)
RH Temperature Compensation:
-20 to 75°C (-4 to 167°F)

RH Time Constant (90% Response at 25°C, in Moving Air @ 1m/s):
   >10 seconds: 10 to 90% RH;
   >15 seconds: 90 to 10% RH

Repeatability: ±1% RH, 0.5°F

Housing: Gray polycarbonate, (IP65, DIN 40050) NEMA rated up to 13, UL listed

Connections: Liquid-tight nylon with neoprene gland, for 0.09 to 0.265" diameter cable; internal 4-pin terminal block accepts 14 to 22 gauge wire

Dimensions:
   HX93A(*) and HX93A(*)-D Enclosure:
   79.8 x 81.8 x 54.9 mm
   (3.14 x 3.22 x 2.16")
   HX93A(*)-D Probe: 15.7 D x 124.5 mm L
   (0.620 x 4.9")

Weight:
   HX93A(*): 170 g (6 oz)
   HX93A(*)-D: 187 g (6.6 oz)

Displays (HX93DA Series Only)
Dual Miniature Loop-Powered Indicators: 3½ digit LCD
Reading Rate: 2.5 times per second
Display Accuracy:
   Relative Humidity: ±2.5% RH
   Temperature: ±0.6°C (1°F)
Display Resolution:
   Relative Humidity: 0.1% RH
   Temperature: 0.1°C (0.1°F)
Display Accuracy in Relation to Output:
   Relative Humidity: ±0.3% RH
   Temperature: ±0.3°C (0.5°F)

To Order *Visit newportUS.com/hx93a for Pricing and Details*

Model No.	Description
HX93A(*)	Wall mount RH and temperature transmitter
HX93A(*)-D	Duct mount RH and temperature transmitter
HX93A(*)-RP1	Remote probe relative humidity/temp transmitter
HX93DAC-(**)	Wall mount, dual display RH/temperature transmitter/indicator
HX93DAC-D-(**)	Duct mount, dual display RH/temperature transmitter/indicator
HX93DAC-RP1-(**)	Remote probe, dual display RH/temperature transmitter/indicator
HX92-CAL	Calibration kit, 11 and 75% RH standards
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
PSU-93	Unregulated power supply, 16 to 23 Vdc, 300 mA max, screw terminal
TX4-100	4-conductor shielded transmitter cable 30 m (100')
CAL-3-HU†	NIST-traceable calibration
HX90DM-KIT	Spare duct mount kit [for HX93DAC-(**)-D, HX93DAC-(**)-RP1, HX93A(*)-D & HX93A(*)-RP1 models only]

* For 4 to 20 mA output, specify "C" or for 0 to 1 Vdc output specify "V".
** For temperature display in °C insert "C" or for temperature display in °F insert "F".
Ordering Example: HX93DAC-F, *wall mount, dual display RH/temp transmitter indicator with °F display with 4 to 20 mA output, with **HX92-CAL** calibration kit.*

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