



J & S Instruments, Inc.

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AS-190 DEW POINT SYSTEM DATA SHEET

The AS-190 Dew Point System is three sensors in one. It is comprised of an AS-145 Combination Relative Humidity and Temperature Probe and a Dew Point Transducer. The AS-145's electronics are built right in a cylindrical probe body so all the user has to do is attach the cable to the Transducer which in turn provides the necessary power and accepts the two 4-20 mA signals from the probe.

The Transducer is not intended for installation in an unprotected environment. It should be installed indoors or in an enclosure. The Transducer in turn reads the two inputs and generates a 4-20 mA output that represents 0-100° F of dew point. The output is linear and proportional to the dew point range and is derived in accordance to standard ASHRAE psychrometric formulas based on dry bulb temperature and relative humidity values.

SPECIFICATIONS:

RELATIVE HUMIDITY

Sensor type:	Capacitive
Measuring range:	0 to 100% RH
Accuracy @ 68° F:	2% from 0 to 90% RH 3% from 90 to 100% RH
Stability:	±2% over 2 years
Operating temperature:	14 to 140° F

TEMPERATURE

Sensor type:	RTD 1000 ohm @ 32° F
Element curve:	.00385 ohms/ohm/° C
Measuring range:	-40 to 160° F
Accuracy:	±1° F @ 77° F

DEW POINT

Accuracy:	±1%
Linearity:	±0.5% FS
Operating temperature:	14 to 140° F
Range:	0 to 100° F

ELECTRICAL

Voltage supply:	24 VDC
Power consumption:	72 mA
Outputs (3 each):	4-20 mA

The AS-190 Dew Point System comes complete with a full one year warranty against defects in materials or workmanship.

February 1998

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