

RHT90 - Precision Industrial Psychrometer with Dew Point

Accurate Measurement of Temperature, Relative Humidity, and Dew Point in Industrial Environments

Precision handheld instrument designed for accurate measurement of temperature, relative humidity, and dew point in challenging industrial environments. Engineered with a high-performance sensor and a user-friendly interface, this device ensures quick response, reliable logging, and comprehensive data analysis. It is ideal for spot-checking and on-site diagnostics across a wide humidity and temperature range.

Key Features:

- Measures dew point, relative humidity, temperature, and H₂O concentration (ppmv/ppmw)
- Fast response sensor with condensation resistance and sensor purge function
- USB connectivity for Excel-compatible data download
- Color LCD display with adjustable brightness
- Data logging: Stores up to 32,000 readings across 32 files
- Adjustable recording interval and duration
- Supports molar mass configuration for gases like air and SF₆
- Measurement unit settings: °C/°F, bara/barg, psia/psig
- Rechargeable Li-ion 3.7V battery, Micro USB 5V charging
- Auto power-off, calibration date tracking, and multilingual support



Applications:

- Compressed air and gas systems dew point monitoring
- Industrial drying processes
- Environmental chamber validation
- HVAC system diagnostics
- Field service in pharmaceutical, food, and chemical industries
- Research and lab applications involving low humidity measurements

Users:

- Industrial maintenance professionals
- HVAC technicians
- Environmental engineers
- Laboratory personnel
- Quality assurance inspectors
- Calibration technicians

Specifications

Specifications	Range	Resolution	Accuracy
Relative Humidity (RH)	0 to 100%RH	0.01%RH	±(0.025%RH + 17.5% reading) <5%RH ±(1%RH + 5% reading) >5%RH ±(2%RH + 3% reading) >15%RH
Dew Point	-58.00 to 86.00°F (-50.00 to 30.00°C)	0.01°F/°C	±2.5°F/°C -58 to -40°F (-50 to -40°C) ±2.0°F/°C -40 to 104°F (-40 to 20°C)
H ₂ O Concentration (ppmv/ppmw)	40 to 20000 ppm	1 ppm 0.01°F/°C	±(7.3 ppm + 8.3% reading)
Temperature	14 to 140°F (-10 to 60°C)	0.01°F/°C	±0.54°F/0.3°C at 14 to 122°F (-10 to 50°C)
Temperature T	14.00 to 140.00°F (-10.00 to 60.00°C)	—	—
Td/F (Dew/Frost Point)	-58.00 to 86.00°F (-50.00 to 30.00°C)	—	—

RHT90 - Precision Industrial Psychrometer with Dew Point

Specifications (continued)

Dew Point Temperature Td	-58.00 to 86.00°F (-50.00 to 30.00°C)	—	—
Dew Point in Atmospheric Pressure	-58.00 to 68.00°F (-50.00 to 20.00°C)	—	—
Humid/Dry Air H2O ppmv/ppmw	40 to 20000ppm	—	—
Absolute Humidity (a)	0.2 to 40.0 gr/ft³ (30.5 to 100.0 g/m³)	—	—
Mixing Ratio (r)	2 to 700 gr/lbs (0.2 to 100 g/kg)	—	—
Dimensions	13 x 8 x 12" (34 x 20 x 30cm)		
Weight	4.9lbs (2.2kg)		

Ordering Information

RHT90 Precision Industrial Psychrometer with Dew Point
RHT90-NIST Precision Industrial Psychrometer with Dew Point with Certificate of Traceability to NIST

For more information about
RHT90, please scan or click:



Imagery for illustration purposes only. Specifications subject to change without notice.
Copyright © 2026 Triplett Test Equipment & Tools. All rights reserved. RHT90_DS_en-US_LTR. Revised: 2026-02-12