



Model DH201/301
Digital Hygro-Thermometer
User Manual

Warranty

This product is fully warranted against defective materials and/or workmanship for a period of one year after purchase, provided it was not improperly used. For your protection, please use this product as soon as possible. If returned, it must be securely wrapped, sent prepaid and insured to:

Pacer Industries, Inc.
95 Krif Road
Keene, NH 03431
PH: 715-723-1141
FX: 715-723-7890

Please include a note with name, address, telephone number and description of the problem. Although we provide assistance on Pacer products both personally and through our literature, it is still the total responsibility of the customer to determine the suitability of the product for use in their application.

This manual is provided by Pacer Industries without any kind of warranty. Precautions have been taken in accurately preparing this manual; however, we neither assume responsibility for any omissions or errors that may appear nor assume liability for any damages that result from the use of the products in accordance with the information contained in the manual.

INTRODUCTION

Pacer's model DH201 (°F) and DH301 (°C) digital Hygro-thermometers are accurate and versatile instruments for measuring temperature and relative humidity in HV AC service, storage and processing facilities and research labs. The units feature an LCD display and use a thin film rapid response RH sensor and a platinum resistance temperature sensor. Probe cables have connectors for easy replacement and calibration.

SECTION 1 - SPECIFICATIONS

Sensors:

Humidity Sensor: Capacitive (Thin Film)
Temperature: PT100 RTD

Range:

Relative Humidity: 5% to 95% RH
Temperature RH Probe:
DH201: -4° to 176°F
DH301: -20° to 80°C

Accuracy:

Relative Humidity: ±2% RH
Temperature: ±1°F (±0.5°C) ±1 digit

Resolution:

Relative Humidity: 0.1% RH
Temperature: 0.1°F or °C

Response Time:

Relative Humidity: 90% of final value in 15 seconds
Temperature: Approximately 60 seconds

Temperature drift:

±0.5%RH per 10°C (18°F)

SPECIFICATIONS (continued)**Operating temperature:**

Instrument: 32° to 125°F (0° to 50°C)
Probe: -4° to 176°F (-20° to 80°C)

Storage temperature: 14°F to 140°F

Power supply: 9V alkaline battery

Battery life: Approximately 10 hours

Battery check: Automatic low battery display

Dimensions:

Instrument: 4.5" x 2.75" x 1"
Probe: 7" length x 1" diameter

Weight: 8.8 ounces with battery

Display: 0.5" LCD, 3 ½ digits

Options:

Model CG-3 charger: PN 6043 (with NiMH
battery/charger)
Sinter filter for HTP201: PN 3901 for harsh environments
Special-purpose temperature probes:
PT201S: PN 6301 GP immersion probe
PT202S: PN 6303 air probe
PT203S: PN 6304 surface probe

Included:

1 piece: DH201 or DH301 Hygro-
Thermometer Unit
1 piece: PN 6060 HTP201 RH probe
1 piece: 9V alkaline battery
1 piece: PN 6003 hard-shell carrying case
1 piece: M2959 Operation manual

SECTION 2 – OPERATION

Operation is simple.

- Install the battery if not already in place.
- Attach the probe cable connector by aligning the keyway, inserting the connector and tightening the collar.
- The slide switch is center OFF, slide to the right for %RH and to the left for temperature.
- Place the probe in the location to be tested.
- The DH201 and DH301 have low-battery indications. When “LO BAT” is displayed, replace (or charge) the battery.
- **WARNING:** The %RH Sensor Probe should not come in contact with dirt or other foreign matter nor should be immersed in water or other liquids. These things can incorrect reading and damage the sensors. If contaminated, the sensors should be cleaned carefully with distilled water and left to dry at least 24 hours in dry air.

NOTES: