

Humidity/Temperature Meter

Small enough for your pocket, big enough to do the job right

System Studies' Humidity/Temperature Meter (P/N 9800-3140) is the ideal instrument for determining the amount of relative humidity in a central office or underground cable environment. Designed for portability and ease of use, the meter provides simultaneous relative humidity and temperature data. This information is particularly important in areas with high sustained temperatures or where steam leaks in underground conduit are a common occurrence.

The combined effects of high cable temperature, cable humidity, utility hole vapor pressure, and rapid cooling of a cable can result in the development of moisture pockets within a cable. By monitoring electrical resistance data, performing specific fault locating techniques, and taking manual temperature and humidity readings, it is possible not only to identify cables where moisture is developing, but also determine the approximate location of the wet sections. In most situations, it is possible to identify potential cable trouble before it becomes service affecting.

The Humidity/Temperature Meter is the ideal tool to use in any application where temperature and humidity readings are required. It reads relative humidity in the range of 5 to 95% with a resolution to 0.1% relative humidity. Temperatures in the range of 14 to 122°F can be recorded with +/- 1°F accuracy.

To simplify the process of reading cable humidity and temperature, the meter is equipped with 18 inches of tubing and a threaded valve stem. These items make it easy to connect the meter to a splice case and obtain a precise measurement. Reading response is under two minutes, and LCD output is easily visible on the meter's display even in relatively low light.

Specifications

Model Number: 9800-3140

Relative Humidity:

- **Range:** 5 to 95%
- **Resolution:** 0.1% RH
- **Accuracy, at 77°F (25°C):** +/-4% RH from 10 to 90% RH
- **Sensor:** Electronic capacitance polymer film

Temperature Range:

 14° to 122° F (-10° to 50° C)

- **Resolution:** 0.1°F (0.1°C)
- **Accuracy:** +/- 1°F (+/- 1°C)
- **Sensor:** Thermistor

Response Time: 80 seconds

Display: Dual LCD: 3-digit, 0.38 (0.97) in high for RH; 3-digit, 0.25 in (0.64 cm) high for temperature

Operating Ambient: 14° to 122°F (-10° to 50°C)

Power: Two AAA batteries (included)

Battery Life: 500 Hours

Dimensions: 6.75 in (17.1 cm) L x 1.94 in (4.9 cm) W x 0.75 in (01.9 cm) D

Shipping Weight: 0.75 lbs (0.34 kg)



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