

## 4129 Temperature Compensated Humidity Transmitter

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Page 1 of 4

## Specification

### Overview

The Honeywell 4129 is a high accuracy humidity transmitter targeted for OEM applications requiring %RH measurement. The 4129 provides a temperature compensated 4-20 mA humidity output.

### Description

**Temperature Compensated** – Humidity output on the 4129 is automatically corrected over the full range of operating conditions.

**Output** – The 4129 transmitter provides one 4-20 mA output proportional to 0-100% RH.

**One-Point Field Calibration** – Portable transfer standards are available which can be used as references to verify and /or adjust the relative humidity calibration on-line. The transmitter incorporates a test jack which allows its %RH output to be read on an optional plug-in digital indicator 0411329-40728-0. Use of the reference standards, as well as the plug-in indicator permits easy calibration verification. Single point adjustment may then be made if necessary.

**Remote Probe Capability (Optional)** – The 4129 can be ordered with a remote probe, with user specified cable lengths of 6, 25 or 50 feet.

**Weatherproof Housing** – Both the duct and wall mount housings are suitable for outdoor use.

**N.I.S.T. Traceable Calibrations Available** – Certification of N.I.S.T. traceability is available as an option.

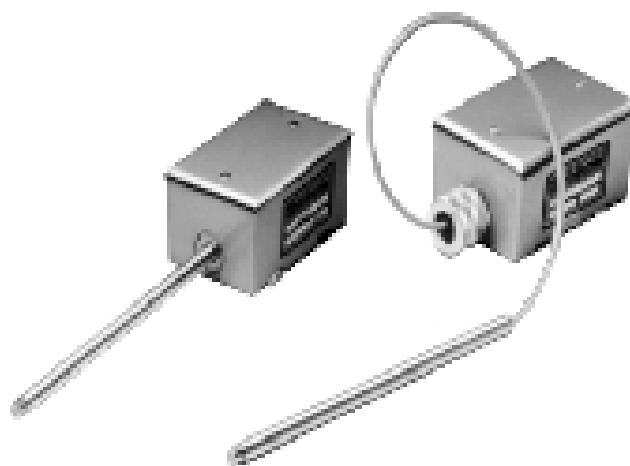


Figure 1 – 4129 Transmitter

### Features

- Temperature Compensated RH
- $\pm 1\%$  RH Accuracy **Option**
- Remote Probe **Option**
- One Point Field Calibration

## Specifications

Performance	
<b>Sensing Element:</b>	Monolithic RHIC sensor
<b>Accuracy:</b>	$\pm 2\%$ RH 0-90% RH at 77F (25C); $\pm 3\%$ RH 0-90% RH at 59-122F (15-50C); $\pm 5\%$ RH 0-90% RH at 32-176F (0-80C);  <b>available as an option:</b> $\pm 1\%$ RH 0-80% RH at 77-95F (25-35C) <i>Includes temperature, linearity, hysteresis and repeatability</i>
<b>Calibration Range:</b>	0-100% RH for 4-20 mA
<b>Time Constant:</b>	50 sec. In air 10 ft/sec. At 77F (25C)
<b>Input voltage Effect:</b>	$\pm 0.002\%$ RH/Volt maximum, which is negligible, from 9.4 to 45 Vdc
<b>RFI Rejection:</b>	Good RFI rejection of normal frequencies with standard installations
<b>Temperature Ratings:</b>	
<b>Operating:</b>	-10 to 185°F (-23 to 85°C) non-condensing
<b>Storage:</b>	-58 to 185°F (-50 to 85°C) non-condensing
<b>Operating Pressure:</b>	50 psi maximum
Installation	
<b>Power Supply:</b>	9.4 Vdc + ( $R_{load} \times 0.02A$ ) min. to 45 Vdc maximum, unregulated. Add 2.7 Vdc for use with the 0411329-40728-0 digital meter.
<b>Recommended <math>R_{load}</math>:</b>	100 ohms + 0.1% at 11.4 Vdc minimum 250 ohms + 0.1% at 14.4 Vdc minimum 500 ohms + 0.1% at 19.4 Vdc minimum  <b>Add 2.7 Vdc for use with 0411329-40728-0 digital meter.</b>
<b>Transmitter Housing:</b>	Duct Mount and Wall mount housings: 4 ½" (144mm) long X 2 ¾" (70mm) wide X 2 ¼" (57mm) deep; cast alloy moisture resistant housing with three ½" NPT integral bosses and gasketed cover. Suitable for outdoor use. Underwriters Laboratories Ltd. Listed 459L. Surface mount hardware supplied
<b>Transmitter Connections:</b>	Screw terminals, non-polar, connect either way
<b>Sensor Housing:</b>	Sensor is protected by 60 micron sintered stainless steel filter.
<b>Mounting:</b>	See dimensional drawings
Maintenance	
<b>Cleaning:</b>	Sintered stainless steel filter can be washed with water and a stiff brush (e.g. toothbrush)
<b>Zero and Span Adjust:</b>	Non-interacting; set zero only for field calibration

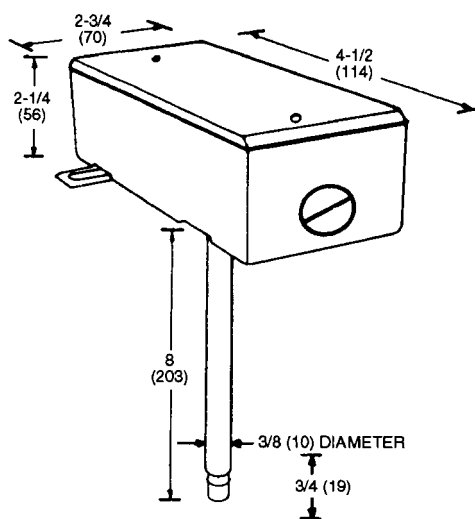


Figure 2 – Dimension Drawing

Distributor :

