


NEW PRODUCT	 A National Instruments Company	Release Year 2017	Released Quarter Q1
Digilent Part Number 410-347		Category Pmods	

OVERVIEW

Product Name: Pmod HYGRO: Digital Humidity and Temperature Sensor

Product Subtitle: N/A

Product Description: The Pmod HYGRO is a relative humidity sensor with integrated temperature sensor for highly accurate measurements at low power. With the TI HDC1080, you can determine the relative humidity of the environment with up to 14 bits of resolution. The Pmod HYGRO is designed to digitally report the relative humidity and ambient temperature upon request by the host board. Up to 14 bits of resolution for each sensor may be collected by allowing for longer conversion times. A resistive heating element can be enabled to test the sensor or to drive off condensation that accumulates on the sensor after being consistently exposed to high humidity conditions.

Key Search Terms: TI HDC1080, Humidity Sensor, Temperature Sensor

Video Link: N/A

Datasheet: <https://reference.digilentinc.com/reference/pmod/pmodhygro/reference-manual>

Demo / Project Links:

https://reference.digilentinc.com/media/reference/pmod/pmodhygro/pmodhygro_library_demo.zip (Microprocessor)

https://github.com/Digilent/vivado-library/tree/master/ip/Pmods/PmodHYGRO_v1_0 (FPGA)

Features

- [TI HDC1080](#) Low Power, High Accuracy Digital Humidity Sensor with Temperature Sensor
- Relative Humidity Accuracy $\pm 2\%$
- Temperature Sensor Accuracy $\pm 0.2\text{ }^{\circ}\text{C}$
- Good stability at high humidity
- 14-bit measurement resolution
- Internal resistive heating element
- 6-pin Pmod connector with I²C interface
- Pass-through Pmod host port for daisy chaining
- Library and example code available

Product Image



Image Links:

- <https://flic.kr/p/NWvXeE> (Oblique)
- <https://flic.kr/p/NWvX4Q> (Top)
- <https://flic.kr/p/NWvXkG> (Bottom)

3 Target Applications

- HVAC
- Smart Thermostats and Room Monitors
- Medical Devices

Related Products

- All Digilent FPGA boards
- Digilent Pro Mx7

PRODUCT DATA

Dimension*	0.8x0.5x1.25 inches	Weight*	0.2 lbs
Product Type	<input checked="" type="checkbox"/> Digilent <input type="checkbox"/> Resell		
Packaging	ESD Bag		
Export	EAR99	HTS Code	8473.30.11.80
Kit Contents	<input type="checkbox"/> USB Cable <input type="checkbox"/> Voucher <input type="checkbox"/> Power Supply Other: <Example>		
Certifications	<input checked="" type="checkbox"/> CE <input checked="" type="checkbox"/> RoHs <input checked="" type="checkbox"/> Reach <input type="checkbox"/> Other:		