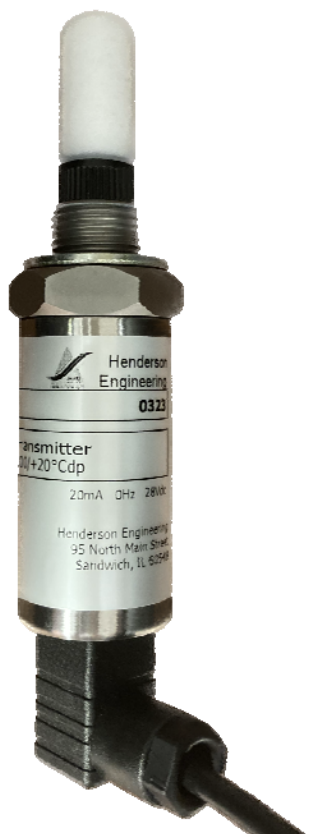


HENDERSON DEWPOINT TRANSMITTER (HDT)

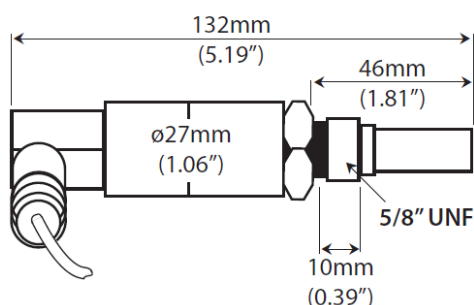
P/N 070-520-010 REV COMPLETE
Complete Kit ¹

P/N 070-520-010 REV TRANSMIT
HDT & Cable Only

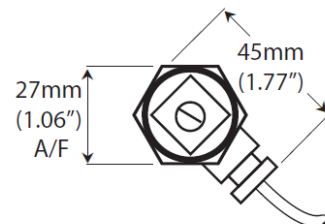
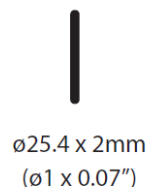


Features

- 2-wire loop powered dew/frost point transmitter
- Easy to install and operate
- Fast response
- Long term stability
- Overall range -148°F to +68°F (-100°C to +20°C) dew/frost point temperature



5/8" Bonded Seal



The Henderson Dewpoint Transmitter (HDT) represents an advancement in aluminum oxide moisture sensing. The HDT's high capacitance sensing element provides outstanding sensitivity, especially at low moisture content, as well as high speed of response and repeatability. The advanced electronic design of the HDT uses modern, high speed, high resolution hardware and software techniques for superior performance. The HDT is clearly a step forward in aluminum oxide moisture sensing technology.

The aluminum oxide moisture sensor is used in greater numbers globally than any other industrial moisture measurement technique. High sensitivity, compact design, ease of use and versatility make the

aluminum oxide moisture transmitter the recognized best choice for continuous moisture measurement in many applications including process gases, high purity gases, glove box environments, compressed air and injection molding.

The HDT is a two wire, loop powered transmitter with a linear 4 - 20 mA output signal corresponding to the moisture content. Locally and remotely mounted display and power supply devices are optionally available.

The HDT is calibrated and supported in the USA, in a modern ISO/IEC 17025:2005 accredited calibration laboratory located in a ISO 9001:2015 registered facility.

¹ Complete kit includes transmitter, cable, two needle valves, and sample block.

HENDERSON DEWPOINT TRANSMITTER (HDT)

Technical Specifications

Performance Specifications									
Measurement range	-148°F - +68°F (-100 - +20°C) dew point Available upon request: -112°F - +86°F (-80°C - +30°C) -148°F - +86°F (-100°C - +30°C)								
Accuracy	±3.6°F (±2°C) dew point								
Response time	5 mins to T95 (dry to wet)								
Repeatability	0.9°F (0.5°C) dew point								
Calibration	Traceable 13-point calibration certificate								
Electrical Specifications									
Output signal	4 - 20 mA (2-wire connection, current source); User configurable over range								
Output	Dew point or moisture content								
Analog output scaled range	Dew point: -148°F up to +48°F (-100 up to +20°C) Moisture content in gas: 0 up to 3000 ppm								
Supply voltage	12 - 28 V DC								
Load resistance	Max 250 Ω @ 14 V (500 Ω @ 24 V)								
Current consumption	23 mA max, depending on output signal								
Compliances	CE & UKCA								
UL approval	Approved								
	UL61010-1 & CAN/CSA C22.2 No. 61010-1								
Operating Specifications									
Operating temperature	-40 - +140°F (-40 - +60°C)								
Compensated temperature range	-4 - +122°F (-20 - +50°C)								
Storage temperature	-40 - +140°F (-40 - +60°C)								
Operating pressure	45 Mpa (450 barg) maximum								
Flow rate	1 to 5 NI/min mounted in standard sampling block 0 to 10 m/sec direct insertion								
Mechanical Specifications									
Ingress protection	IP66 in accordance with standard BS EN 60529:1992; NEMA 4 protection in accordance with standard NEMA 250-2003								
Oxygen service	Optional: cleaned for enriched oxygen service								
Housing material	316 stainless steel								
Dimensions	MiniDIN 43650 form C L = 132 mm x Ø45 mm (with connector cable)								
Filter (sensor protection)	Standard: HDPE <10µm Optional: 316 stainless steel sintered guard <80µm								
Process connection	5/8" – 18 UNF								
Weight	5.29 ounces (150 g)								
Electrical connections	MiniDIN 43650 form C								
Mating Electrical Connectors	Mating connector supplied as standard								
Diagnostic conditions (factory programmed)	<table> <tr> <th>Condition</th><th>Output</th></tr> <tr> <td>Sensor fault:</td><td>23 mA output</td></tr> <tr> <td>Under-range dew point:</td><td>4 mA output</td></tr> <tr> <td>Over-range dew point:</td><td>20 mA output</td></tr> </table>	Condition	Output	Sensor fault:	23 mA output	Under-range dew point:	4 mA output	Over-range dew point:	20 mA output
Condition	Output								
Sensor fault:	23 mA output								
Under-range dew point:	4 mA output								
Over-range dew point:	20 mA output								



SAHARA AIR PRODUCTS

A Division of Henderson Engineering Co., Inc.

95 North Main Street

Sandwich IL 60548

815-786-9471 • 800-544-4379 • Fax: 815-786-6117

www.saharahenderson.com