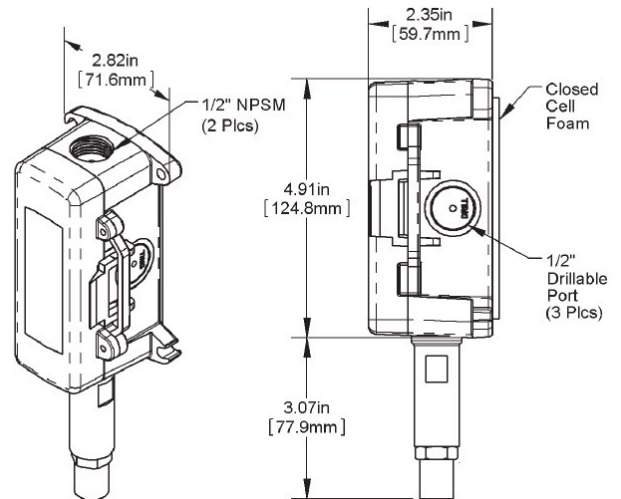




The MCS-HUMD-OS Specifications & Description

Product Characteristics

Input Power.....10 to 35 VDC, 22mA max
 or 12 to 24 VAC, 0.53VA max
 Output.....0 to 5VDC or 4 to 20 mA
 Accuracy.....±2% RH
 Thermistor.....100K @ 77°F
 Enclosure material.....Polycarbonate, UV resistant
 Enclosures Ratings.....NEMA-4, IP66, UL94V-0
 Operation Range.....-22° to 158°F, (-30° to 70°C)
 Filter.....100 micron sintered stainless
 steel filter
 Humidity Sensor.....Resistive
 Temperature Sensor....Passive
 Dimensions.....2.82" x 2.35" x 7.98"



Part # MCS-HUMD-OS

Product Description

Outside Air Combination Sensor with Humidity Transmitter and 100K Thermistor Temperature Transmitter

Humidity control is an important aspect of any climate control system. Therefore, humidity sensors must be both accurate and dependable. MCS's outside air humidity and temperature sensor is tested for accuracy, eliminating the need for field calibration.

MCS's temperature and humidity sensor has etched Teflon leadwires and are built to withstand high humidity and condensation and perform under real world conditions. This is especially important in an Outside Air Unit which can be exposed to rain, snow, and large temperature swings.

Product Specifications

Humidity	VDC (S1 to GND)	mA
0%	0	4
10%	0.5	5.6
20%	1	7.2
30%	1.5	8.8
40%	2	10.4
50%	2.5	12
60%	3	13.6
70%	3.5	15.2
80%	4	16.8
90%	4.5	18.4
100%	5	20

Temp (°F / °C)	Resist (ohms)	VDC (S1 to GND)
-5/-20.6	1,141,345	0.403
0 /-17.7	964,963	0.470
5/-15.0	818,070	0.545
10/-12.2	695,433	0.629
15 /-9.4	592,755	0.722
20/-6.6	506,560	0.824
25/-3.8	434,007	0.936
30/-1.1	372,778	1.058
35/1.6	320,976	1.188
40/4.4	277,040	1.326
45/7.2	239,686	1.472
50/10	207,850	1.624
55/12.7	180,647	1.782

Temp (°F / °C)	Resist (ohms)	VDC (S1 to GND)
60/15.5	157,353	1.943
65/18.3	137,363	2.106
70/21.1	120,169	2.271
75/23.9	105,347	2.435
80/26.7	92,541	2.597
85/29.4	81,454	2.756
90/32.2	71,838	2.910
95/35	63,480	3.058
100/37.7	56,200	3.201
105/40.5	49,846	3.337
110/43.3	44,287	3.465
115/46.1	39,420	3.586
120/48.8	35,149	3.370

Temp (°F / °C)	Resist (ohms)	VDC (S1 to GND)
125/51.6	31,399	3.805
130/54.4	28,093	3.903
135/57.2	25,173	3.994
140/60	22,590	4.079
145/62.8	20,309	4.156
150/65.5	18,284	4.227
155/68.3	16,484	4.292
160/71.1	14,881	4.352
165/73.8	13,456	4.407
170/76.6	12,185	4.457
175/79.4	11,052	4.502
180/82.2	10,033	4.544
185/85	9,121	4.582

For complete temperature chart, refer to the MCS-T100 spec sheet