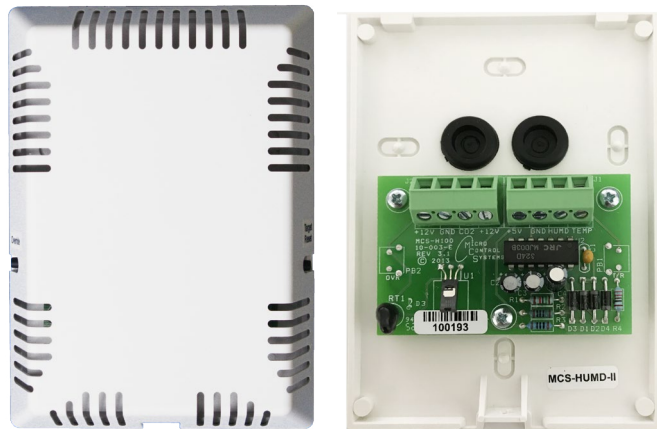




MCS-HUMD-II

Description & Specifications



Part # MCS-HUMD-II

Description

The Temperature Humidity zone mounted sensor is supplied in an attractive package which can be mounted on standard USA or Overseas electrical boxes. The package includes rubber wire grommets that eliminate any draft influence on the sensors. Both the temperature and humidity sensors are the MCS highly reliable sensors with accuracy, durability and extremely fast response time.

The large resistance range allows the use of over 1000' of cable with no noticeable effect. The table below provides a cross reference between °F/°C, OHMS, and VOLTS DC at the sensor input pin (S1) on the MCS controller.

RH to VDC Chart

RH (%)	OUT (vdc)	RH (%)	OUT (vdc)	RH (%)	OUT (vdc)	RH (%)	OUT (vdc)	RH (%)	OUT (vdc)	RH (%)	OUT (vdc)	RH (%)	OUT (vdc)	RH (%)	OUT (vdc)	RH (%)	OUT (vdc)	RH (%)	OUT (vdc)
1	0.831	11	1.138	21	1.446	31	1.753	41	2.061	51	2.368	61	2.676	71	2.983	81	3.291	91	3.598
2	0.862	12	1.169	22	1.477	32	1.784	42	2.092	52	2.399	62	2.707	72	3.014	82	3.322	92	3.629
3	0.892	13	1.200	23	1.507	33	1.815	43	2.122	53	2.430	63	2.737	73	3.045	83	3.352	93	3.660
4	0.923	14	1.231	24	1.538	34	1.846	44	2.153	54	2.461	64	2.768	74	3.076	84	3.383	94	3.691
5	0.954	15	1.261	25	1.569	35	1.876	45	2.184	55	2.491	65	2.799	75	3.106	85	3.414	95	3.721
6	0.985	16	1.292	26	1.600	36	1.907	46	2.215	56	2.522	66	2.830	76	3.137	86	3.445	96	3.752
7	1.015	17	1.323	27	1.630	37	1.938	47	2.245	57	2.553	67	2.860	77	3.168	87	3.475	97	3.783
8	1.046	18	1.354	28	1.661	38	1.969	48	2.276	58	2.584	68	2.891	78	3.199	88	3.506	98	3.814
9	1.077	19	1.384	29	1.692	39	1.999	49	2.307	59	2.614	69	2.922	79	3.229	89	3.537	99	3.844
10	1.108	20	1.415	30	1.723	40	2.030	50	2.338	60	2.645	70	2.953	80	3.260	90	3.568	100	3.875

Specifications

- Std Temperature Range +32° to +158°F (0° to +70°C)
- Std Temperature Accuracy ±0.36° F (±0.2°C)
- Ext Temperature Range..... -40° to +248° F (-40° to 120°C)
- Ext Temperature Accuracy..... ±1.5°F (±0.8°C)
- Resistance Range 2 Meg to 286 ohms
- Humidity Operating Range 0-100% RH
- Humidity Accuracy ±3.5% , 0-100% RH @ 25°C, nc
- Humidity Stability ±1% at 50% RH over 5 years
- Humidity Output Voltage..... 0.8 to 3.9vdc
- Repeatability..... ±0.5% RH
- Input Voltage..... 5vdc
- Sensor Resistance 100,000 ohms @ 77°F (25°C)
- Operating Temperature..... -40° to +185°F (-40° to 85°C)
- Storage Temperature..... -60° to +230°F (-51° to 110°C)
- Packaging Dimensions 4.30"W × 6.50"L × 2.25"H

Because of the sensors accuracy there is complete interchangeability with no hardware calibration required.

The humidity sensor outputs a linear signal and is a low power device (200µA typical @ 5vdc). Because of its interchangeability, quality and reliability it is used in commercial, industrial military, and aerospace applications.

Packaging

- 18-8 stainless steel Truss Head phillips machine screw, 6-32 Thread, 3/4" Length
- #4 x 3/8" Phillips Panhead Zinc Plated Steel Screw
- Ship Weight..... 0.32 lb (approx)
- Box Dimensions..... 6.25" x 4.25" x 2.25" (approx)