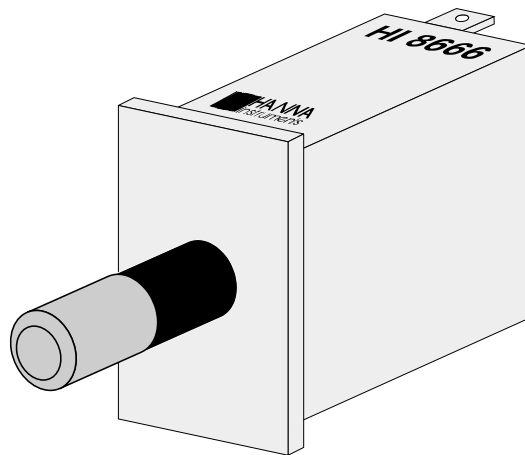


Instruction Manual

HI 8666 RH/°C Transmitter



This Instrument is in Compliance with the CE Directives

 **HANNA**
instruments
www.hannainst.com



Dear Customer,

Thank you for choosing a Hanna Instruments Product.

Please read this instruction manual carefully before using the instrument.

This manual will provide you with all the necessary information for the correct use of the instrument, as well as a precise idea of its versatility in a wide range of applications.

This instrument is in compliance with **CE** directives EN 50081-1 and EN 50082-1.

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PRELIMINARY EXAMINATION

Remove the instrument from the packing material and examine it carefully to make sure that no damage has occurred during shipment. If noticeable damage is found, immediately notify your Dealer.

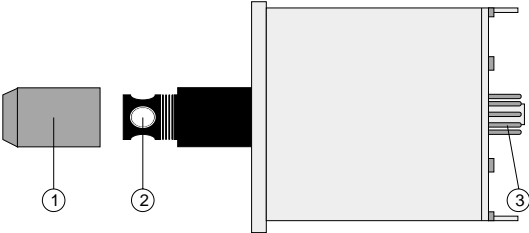
Note: Conserve all packing material until the instrument has been observed to function correctly because all defective items must be returned to the Dealer in their original packing.

GENERAL DESCRIPTION

HI 8666 is a 2-wire, 4 to 20 mA relative humidity and temperature transmitter. The instrument transmits electrically isolated outputs that are linear and proportional to RH% and °C. It can be surface or panel mounted, and used with a detachable connector. The power must be supplied from an external source from 12V to 24V. See the diagrams on pages 4-6 of this instruction manual for connections from the transmitter to other equipment, such as recorder.

Note: After 30 minutes of measurements over 90% RH, the probe sensors could experience secondary absorption, leading to approximately +6% RH saturation. This means that the readings will be inaccurate. To restore the probe to a normal condition, place the probe into the LiCl well of **HI 7102** for 24 hours (see page 7).

FUNCTIONAL DESCRIPTION



- 1) Sintered Cap
- 2) Relative Humidity and Temperature Sensors
- 3) 11-Pin Connector

SPECIFICATIONS

Range	RH °C	0 (4 mA) to 100% (20 mA) -20 (4 mA) to 60°C (20 mA)
Resolution	RH °C	±0.125% RH, ±0.02 mA ±0.1°C, ±0.02 mA
Accuracy	RH °C	±2% RH (5 to 80% RH) ±4% RH (80 to 90% RH, 0 to 40°C) ±1% of span
Typical EMC Deviation	RH °C	±2.5% RH, ±0.4 mA ±1°C, ±0.2 mA
Output Signal		4 to 20 mA
Response Time		6" without sintered filter, 1' with filter
Power Supply		12 to 24V externally supplied
Maximum Loop Impedance		600 ohm
Environment		-20 to 60°C (-4 to 140°F); 5 to 95% RH
Dimensions		79 x 49 x 140 mm (3.1 x 1.9 x 5.5")
Weight		200 g (7 oz.)

TERMINAL BOARD AND INSTALLATION

The **HI 8666** Transmitter has an 11-pin connector at the rear of the instrument.

Connect it to a UNDECAL relay socket.

The terminals are:

1 +°C: Positive Terminal;

9 -°C: Negative Terminal;

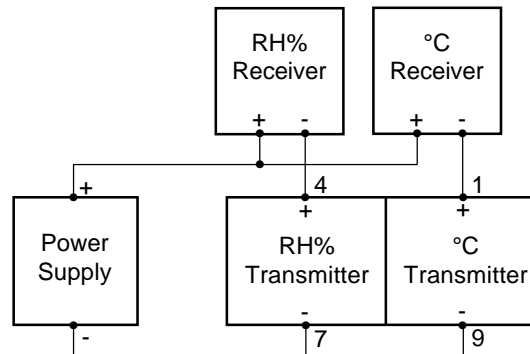
4 +RH: Positive Terminal;

7 -RH: Negative Terminal.

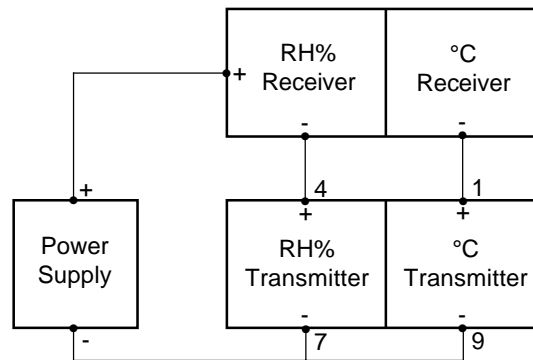
Terminals 2, 3, 5, 6, 8, 10 and 11 are not connected.

See the following figures for recommended installation:

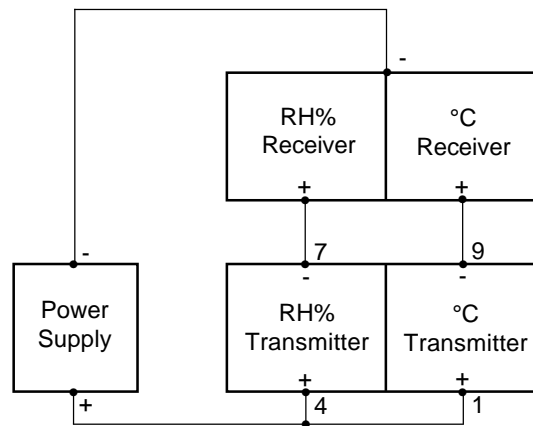
1. Passive and isolated receivers



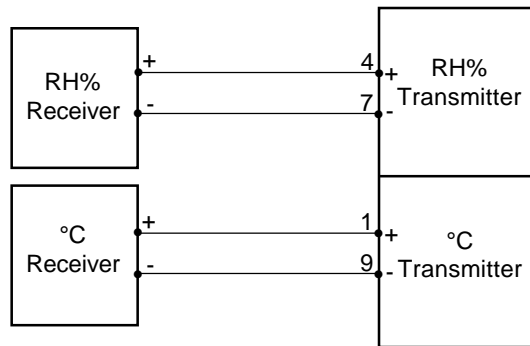
2. Passive and not isolated receivers
(Common positive)



3. Passive and not isolated receivers
(Common negative)



4. Active receivers
(both isolated or not)



CALIBRATION CHECKING PROCEDURE

All Hanna relative humidity transmitters have been precalibrated at the factory.

Hanna Instruments uses state-of-the-art thermal humidity chambers for this purpose.

It is generally recommended to have all RH transmitter recalibrated at least once a year. For an accurate annual recalibration, contact your nearest Hanna Service Center.

You can also check the status of your **HI 8666** by using the Hanna mini-calibration chambers **HI 7102**.

The kit includes two thermally isolated chambers, each one equipped with a threaded cap and three bottles containing the appropriate precalibrated saturated salts to produce a known RH value.



This calibration checking procedure is written to verify that the meter still meets the electrical calibration specifications of the factory.

PREPARING THE CALIBRATION SOLUTIONS

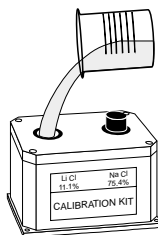
- Pour approximately 26 cc of distilled water into a glass container.
- Immerse this container into a bath of ice and water and shake briefly.
- Slowly add the contents of a **HI 7111** bottle containing LiCl into the glass container while continuing to shake.



- When the salt has dissolved completely, add all the content of the second bottle of **HI 7111**.

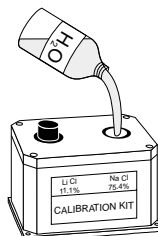


- Allow the solution obtained to cool, and then pour it into the chamber marked "RH 11.1%", making sure that no residue remains on the walls of the glass container.

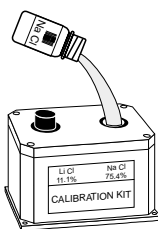


- Seal the chamber well when not in use, as the LiCl solution is extremely hygroscopic and tends to capture the humidity present in the air causing the solution to expand in volume and to overflow from the container.

- Pour approximately 12 cc of distilled water into the other chamber marked "RH 75.4%".



- Add all the content of the **HI 7121** bottle containing NaCl while continuously shaking the container to avoid the formation of lumps. Seal this container well when not in use.



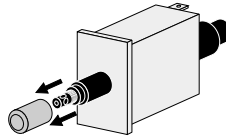
- The calibration kit needs approximately 4 hours for stabilization.



CHECKING THE RH CALIBRATION

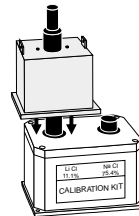
- Bring the calibration kit to a temperature of approximately 20°C.

- Remove the sintered cap from the probe of **HI 8666**.



- Connect the unit to a 12 to 24VDC power supply and hook up a multimeter (range of 20mA) in series with the circuit.

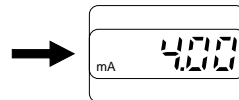
- Remove the cap from the "RH 11.1%" chamber containing the LiCl solution and insert the **HI 8666** paying attention not to dip it into the liquid.



- Wait for the measurement to stabilize (this takes approximately 4 hours).



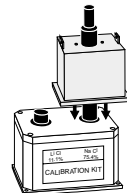
- Look at the multimeter display: the reading should be 4.00 mA, representing the theoretical chamber value of 0.0% RH.




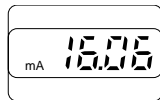
All RH to mA conversions can be made with the tables provided (see page 12).

- Remove the **HI 8666** from the chamber and tightly seal the chamber containing the LiCl solution.

- Remove the cap from the "RH 75.4%" chamber containing the NaCl solution and insert the **HI 8666**.



- Wait for the measurement to stabilize (approximately  4 hours)
- Insert the probe in the "RH 75.4%" chamber, the multimeter reading should be 16.06 mA: this represents the theoretical chamber value of 75.4% RH.

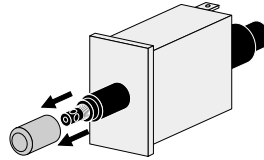


- The relative humidity calibration checking procedure is complete. If the theoretical values are not within $\pm 1\%$, contact your dealer or your closest Hanna Service Center for a fast and accurate recalibration.

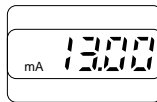
Spare saturation salts are also available: **HI 7111/P** (LiCl) for low range humidity, and **HI 7121/P** (NaCl) for high range humidity.

CHECKING THE TEMPERATURE CALIBRATION

- Remove the sintered cap from the probe of **HI 8666**.



- Connect the unit to a 12 to 24VDC power supply and hook up a multimeter (range of 20mA) in series with the circuit.
- Place the **HI 8666** into a stable temperature environment of 25°C, preferably a temperature chamber, and wait for the temperature to stabilize.
- Using a NIST certified thermometer as a reference, e.g. **ChecktempC/N**, verify that the ammeter reading is matching the temperature, e.g. 13.00 mA for 25°C.



All temperature to mA conversions can be made with the tables provided (see page 16).

- Recheck the temperature at both 10°C (10.00 mA) and 40°C (16.00 mA): they should both be within $\pm 1\%$.

If either setting is out of range, the unit must be repaired or re-calibrated electrically. Contact your dealer or your closest Hanna Service Center.

TABLES FOR RH CHECKING

Rh.	Curr.	Rh.	Curr.	Rh.	Curr.	Rh.	Curr.	Rh.	Curr.
.0000	4.000	.1000	4.016	.2000	4.032	.3000	4.048	.4000	4.064
.5000	4.080	.6000	4.096	.7000	4.112	.8000	4.128	.9000	4.144
1.000	4.160	1.100	4.176	1.200	4.192	1.300	4.208	1.400	4.224
1.500	4.240	1.600	4.256	1.700	4.272	1.800	4.288	1.900	4.304
2.000	4.320	2.100	4.336	2.200	4.352	2.300	4.368	2.400	4.384
2.500	4.400	2.600	4.416	2.700	4.432	2.800	4.448	2.900	4.464
3.000	4.480	3.100	4.496	3.200	4.512	3.300	4.528	3.400	4.544
3.500	4.560	3.600	4.576	3.700	4.592	3.800	4.608	3.900	4.624
4.000	4.640	4.100	4.656	4.200	4.672	4.300	4.688	4.400	4.704
4.500	4.720	4.600	4.736	4.700	4.752	4.800	4.768	4.900	4.784
5.000	4.800	5.100	4.816	5.200	4.832	5.300	4.848	5.400	4.864
5.500	4.880	5.600	4.896	5.700	4.912	5.800	4.928	5.900	4.944
6.000	4.960	6.100	4.976	6.200	4.992	6.300	5.008	6.400	5.024
6.500	5.040	6.600	5.056	6.700	5.072	6.800	5.088	6.900	5.104
7.000	5.120	7.100	5.136	7.200	5.152	7.300	5.168	7.400	5.184
7.500	5.200	7.600	5.216	7.700	5.232	7.800	5.248	7.900	5.264
8.000	5.280	8.100	5.296	8.200	5.312	8.300	5.328	8.400	5.344
8.500	5.360	8.600	5.376	8.700	5.392	8.800	5.408	8.900	5.424
9.000	5.440	9.100	5.456	9.200	5.472	9.300	5.488	9.400	5.504
9.500	5.520	9.600	5.536	9.700	5.552	9.800	5.568	9.900	5.584
10.00	5.600	10.10	5.616	10.20	5.632	10.30	5.648	10.40	5.664
10.50	5.680	10.60	5.696	10.70	5.712	10.80	5.728	10.90	5.744
11.00	5.760	11.10	5.776	11.20	5.792	11.30	5.808	11.40	5.824
11.50	5.840	11.60	5.856	11.70	5.872	11.80	5.888	11.90	5.904
12.00	5.920	12.10	5.936	12.20	5.952	12.30	5.968	12.40	5.984
12.50	6.000	12.60	6.016	12.70	6.032	12.80	6.048	12.90	6.064
13.00	6.080	13.10	6.096	13.20	6.112	13.30	6.128	13.40	6.144
13.50	6.160	13.60	6.176	13.70	6.192	13.80	6.208	13.90	6.224
14.00	6.240	14.10	6.256	14.20	6.272	14.30	6.288	14.40	6.304
14.50	6.320	14.60	6.336	14.70	6.352	14.80	6.368	14.90	6.384
15.00	6.400	15.10	6.416	15.20	6.432	15.30	6.448	15.40	6.464
15.50	6.480	15.60	6.496	15.70	6.512	15.80	6.528	15.90	6.544
16.00	6.560	16.10	6.576	16.20	6.592	16.30	6.608	16.40	6.624
16.50	6.640	16.60	6.656	16.70	6.672	16.80	6.688	16.90	6.704
17.00	6.720	17.10	6.736	17.20	6.752	17.30	6.768	17.40	6.784
17.50	6.800	17.60	6.816	17.70	6.832	17.80	6.848	17.90	6.864
18.00	6.880	18.10	6.896	18.20	6.912	18.30	6.928	18.40	6.944
18.50	6.960	18.60	6.976	18.70	6.992	18.80	7.008	18.90	7.024
19.00	7.040	19.10	7.056	19.20	7.072	19.30	7.088	19.40	7.104
19.50	7.120	19.60	7.136	19.70	7.152	19.80	7.168	19.90	7.184
20.00	7.200	20.10	7.216	20.20	7.232	20.30	7.248	20.40	7.264
20.50	7.280	20.60	7.296	20.70	7.312	20.80	7.328	20.90	7.344
21.00	7.360	21.10	7.376	21.20	7.392	21.30	7.408	21.40	7.424
21.50	7.440	21.60	7.456	21.70	7.472	21.80	7.488	21.90	7.504
22.00	7.520	22.10	7.536	22.20	7.552	22.30	7.568	22.40	7.584
22.50	7.600	22.60	7.616	22.70	7.632	22.80	7.648	22.90	7.664
23.00	7.680	23.10	7.696	23.20	7.712	23.30	7.728	23.40	7.744
23.50	7.760	23.60	7.776	23.70	7.792	23.80	7.808	23.90	7.824
24.00	7.840	24.10	7.856	24.20	7.872	24.30	7.888	24.40	7.904
24.50	7.920	24.60	7.936	24.70	7.952	24.80	7.968	24.90	7.984
25.00	8.000	25.10	8.016	25.20	8.032	25.30	8.048	25.40	8.064
25.50	8.080	25.60	8.096	25.70	8.112	25.80	8.128	25.90	8.144
26.00	8.160	26.10	8.176	26.20	8.192	26.30	8.208	26.40	8.224
26.50	8.240	26.60	8.256	26.70	8.272	26.80	8.288	26.90	8.304
27.00	8.320	27.10	8.336	27.20	8.352	27.30	8.368	27.40	8.384
27.50	8.400	27.60	8.416	27.70	8.432	27.80	8.448	27.90	8.464
28.00	8.480	28.10	8.496	28.20	8.512	28.30	8.528	28.40	8.544
28.50	8.560	28.60	8.576	28.70	8.592	28.80	8.608	28.90	8.624
29.00	8.640	29.10	8.656	29.20	8.672	29.30	8.688	29.40	8.704
29.50	8.720	29.60	8.736	29.70	8.752	29.80	8.768	29.90	8.784

Rh.	Curr.	Rh.	Curr.	Rh.	Curr.	Rh.	Curr.	Rh.	Curr.
30.00	8.800	30.10	8.816	30.20	8.832	30.30	8.848	30.40	8.864
30.50	8.880	30.60	8.896	30.70	8.912	30.80	8.928	30.90	8.944
31.00	8.960	31.10	8.976	31.20	8.992	31.30	9.008	31.40	9.024
31.50	9.040	31.60	9.056	31.70	9.072	31.80	9.088	31.90	9.104
32.00	9.120	32.10	9.136	32.20	9.152	32.30	9.168	32.40	9.184
32.50	9.200	32.60	9.216	32.70	9.232	32.80	9.248	32.90	9.264
33.00	9.280	33.10	9.296	33.20	9.312	33.30	9.328	33.40	9.344
33.50	9.360	33.60	9.376	33.70	9.392	33.80	9.408	33.90	9.424
34.00	9.440	34.10	9.456	34.20	9.472	34.30	9.488	34.40	9.504
34.50	9.520	34.60	9.536	34.70	9.552	34.80	9.568	34.90	9.584
35.00	9.600	35.10	9.616	35.20	9.632	35.30	9.648	35.40	9.664
35.50	9.680	35.60	9.696	35.70	9.712	35.80	9.728	35.90	9.744
36.00	9.760	36.10	9.776	36.20	9.792	36.30	9.808	36.40	9.824
36.50	9.840	36.60	9.856	36.70	9.872	36.80	9.888	36.90	9.904
37.00	9.920	37.10	9.936	37.20	9.952	37.30	9.968	37.40	9.984
37.50	10.00	37.60	10.01	37.70	10.03	37.80	10.04	37.90	10.06
38.00	10.08	38.10	10.09	38.20	10.11	38.30	10.12	38.40	10.14
38.50	10.16	38.60	10.17	38.70	10.19	38.80	10.20	38.90	10.22
39.00	10.24	39.10	10.25	39.20	10.27	39.30	10.28	39.40	10.30
39.50	10.32	39.60	10.33	39.70	10.35	39.80	10.36	39.90	10.38
40.00	10.40	40.10	10.41	40.20	10.43	40.30	10.44	40.40	10.46
40.50	10.48	40.60	10.49	40.70	10.51	40.80	10.52	40.90	10.54
41.00	10.56	41.10	10.57	41.20	10.59	41.30	10.60	41.40	10.62
41.50	10.64	41.60	10.65	41.70	10.67	41.80	10.68	41.90	10.70
42.00	10.72	42.10	10.73	42.20	10.75	42.30	10.76	42.40	10.78
42.50	10.80	42.60	10.81	42.70	10.83	42.80	10.84	42.90	10.86
43.00	10.88	43.10	10.89	43.20	10.91	43.30	10.92	43.40	10.94
43.50	10.96	43.60	10.97	43.70	10.99	43.80	11.00	43.90	11.02
44.00	11.04	44.10	11.05	44.20	11.07	44.30	11.08	44.40	11.10
44.50	11.12	44.60	11.13	44.70	11.15	44.80	11.16	44.90	11.18
45.00	11.20	45.10	11.21	45.20	11.23	45.30	11.24	45.40	11.26
45.50	11.28	45.60	11.29	45.70	11.31	45.80	11.32	45.90	11.34
46.00	11.36	46.10	11.37	46.20	11.39	46.30	11.40	46.40	11.42
46.50	11.44	46.60	11.45	46.70	11.47	46.80	11.48	46.90	11.50
47.00	11.52	47.10	11.53	47.20	11.55	47.30	11.56	47.40	11.58
47.50	11.60	47.60	11.61	47.70	11.63	47.80	11.64	47.90	11.66
48.00	11.68	48.10	11.69	48.20	11.71	48.30	11.72	48.40	11.74
48.50	11.76	48.60	11.77	48.70	11.79	48.80	11.80	48.90	11.82
49.00	11.84	49.10	11.85	49.20	11.87	49.30	11.88	49.40	11.90
49.50	11.92	49.60	11.93	49.70	11.95	49.80	11.96	49.90	11.98
50.00	12.00	50.10	12.01	50.20	12.03	50.30	12.04	50.40	12.06
50.50	12.08	50.60	12.09	50.70	12.11	50.80	12.12	50.90	12.14
51.00	12.16	51.10	12.17	51.20	12.19	51.30	12.20	51.40	12.22
51.50	12.24	51.60	12.25	51.70	12.27	51.80	12.28	51.90	12.30
52.00	12.32	52.10	12.33	52.20	12.35	52.30	12.36	52.40	12.38
52.50	12.40	52.60	12.41	52.70	12.43	52.80	12.44	52.90	12.46
53.00	12.48	53.10	12.49	53.20	12.51	53.30	12.52	53.40	12.54
53.50	12.56	53.60	12.57	53.70	12.59	53.80	12.60	53.90	12.62
54.00	12.64	54.10	12.65	54.20	12.67	54.30	12.68	54.40	12.70
54.50	12.72	54.60	12.73	54.70	12.75	54.80	12.76	54.90	12.78
55.00	12.80	55.10	12.81	55.20	12.83	55.30	12.84	55.40	12.86
55.50	12.88	55.60	12.89	55.70	12.91	55.80	12.92	55.90	12.94
56.00	12.96	56.10	12.97	56.20	12.99	56.30	13.00	56.40	13.02
56.50	13.04	56.60	13.05	56.70	13.07	56.80	13.08	56.90	13.10
57.00	13.12	57.10	13.13	57.20	13.15	57.30	13.16	57.40	13.18
57.50	13.20	57.60	13.21	57.70	13.23	57.80	13.24	57.90	13.26
58.00	13.28	58.10	13.29	58.20	13.31	58.30	13.32	58.40	13.34
58.50	13.36	58.60	13.37	58.70	13.39	58.80	13.40	58.90	13.42
59.00	13.44	59.10	13.45	59.20	13.47	59.30	13.48	59.40	13.50
59.50	13.52	59.60	13.53	59.70	13.55	59.80	13.56	59.90	13.58

Rh.	Curr.	Rh.	Curr.	Rh.	Curr.	Rh.	Curr.	Rh.	Curr.
60.00	13.60	60.10	13.61	60.20	13.63	60.30	13.64	60.40	13.66
60.50	13.68	60.60	13.69	60.70	13.71	60.80	13.72	60.90	13.74
61.00	13.76	61.10	13.77	61.20	13.79	61.30	13.80	61.40	13.82
61.50	13.84	61.60	13.85	61.70	13.87	61.80	13.88	61.90	13.90
62.00	13.92	62.10	13.93	62.20	13.95	62.30	13.96	62.40	13.98
62.50	14.00	62.60	14.01	62.70	14.03	62.80	14.04	62.90	14.06
63.00	14.08	63.10	14.09	63.20	14.11	63.30	14.12	63.40	14.14
63.50	14.16	63.60	14.17	63.70	14.19	63.80	14.20	63.90	14.22
64.00	14.24	64.10	14.25	64.20	14.27	64.30	14.28	64.40	14.30
64.50	14.32	64.60	14.33	64.70	14.35	64.80	14.36	64.90	14.38
65.00	14.40	65.10	14.41	65.20	14.43	65.30	14.44	65.40	14.46
65.50	14.48	65.60	14.49	65.70	14.51	65.80	14.52	65.90	14.54
66.00	14.56	65.10	14.57	66.20	14.59	66.30	14.60	66.40	14.62
66.50	14.64	66.60	14.65	66.70	14.67	66.80	14.68	66.90	14.70
67.00	14.72	67.10	14.73	67.20	14.75	67.30	14.76	67.40	14.78
67.50	14.80	67.60	14.81	67.70	14.83	67.80	14.84	67.90	14.86
68.00	14.88	68.10	14.89	68.20	14.91	68.30	14.92	68.40	14.94
68.50	14.96	68.60	14.97	68.70	14.99	68.80	15.00	68.90	15.02
69.00	15.04	69.10	15.05	69.20	15.07	69.30	15.08	69.40	15.10
69.50	15.12	69.60	15.13	69.70	15.15	69.80	15.16	69.90	15.18
70.00	15.20	70.10	15.21	70.20	15.23	70.30	15.24	70.40	15.26
70.50	15.28	70.60	15.29	70.70	15.31	70.80	15.32	70.90	15.34
71.00	15.36	71.10	15.37	71.20	15.39	71.30	15.40	71.40	15.42
71.50	15.44	71.60	15.45	71.70	15.47	71.80	15.48	71.90	15.50
72.00	15.52	72.10	15.53	72.20	15.55	72.30	15.56	72.40	15.58
72.50	15.60	72.60	15.61	72.70	15.63	72.80	15.64	72.90	15.66
73.00	15.68	73.10	15.69	73.20	15.71	73.30	15.72	73.40	15.74
73.50	15.76	73.60	15.77	73.70	15.79	73.80	15.80	73.90	15.82
74.00	15.84	74.10	15.85	74.20	15.87	74.30	15.88	74.40	15.90
74.50	15.92	74.60	15.93	74.70	15.95	74.80	15.96	74.90	15.98
75.00	16.00	75.10	16.01	75.20	16.03	75.30	16.04	75.40	16.06
75.50	16.08	75.60	16.09	75.70	16.11	75.80	16.12	75.90	16.14
76.00	16.16	76.10	16.17	76.20	16.19	76.30	16.20	76.40	16.22
76.50	16.24	76.60	16.25	76.70	16.27	76.80	16.28	76.90	16.30
77.00	16.32	77.10	16.33	77.20	16.35	77.30	16.36	77.40	16.38
77.50	16.40	77.60	16.41	77.70	16.43	77.80	16.44	77.90	16.46
78.00	16.48	78.10	16.49	78.20	16.51	78.30	16.52	78.40	16.54
78.50	16.56	78.60	16.57	78.70	16.59	78.80	16.60	78.90	16.62
79.00	16.64	79.10	16.65	79.20	16.67	79.30	16.68	79.40	16.70
79.50	16.72	79.60	16.73	79.70	16.75	79.80	16.76	79.90	16.78
80.00	16.80	80.10	16.81	80.20	16.83	80.30	16.84	80.40	16.86
80.50	16.88	80.60	16.89	80.70	16.91	80.80	16.92	80.90	16.94
81.00	16.96	81.10	16.97	81.20	16.99	81.30	17.00	81.40	17.02
81.50	17.04	81.60	17.05	81.70	17.07	82.80	17.08	81.90	17.10
82.00	17.12	82.10	17.13	82.20	17.15	82.30	17.16	82.40	17.18
82.50	17.20	82.60	17.21	82.70	17.23	82.80	17.24	82.90	17.26
83.00	17.28	83.10	17.29	83.20	17.31	83.30	17.32	83.40	17.34
83.50	17.36	83.60	17.37	83.70	17.39	83.80	17.40	83.90	17.42
84.00	17.44	84.10	17.45	84.20	17.47	84.30	17.48	84.40	17.50
84.50	17.52	84.60	17.53	84.70	17.55	84.80	17.56	84.90	17.58
85.00	17.60	85.10	17.61	85.20	17.63	85.30	17.64	85.40	17.66
85.50	17.68	85.60	17.69	85.70	17.71	85.80	17.72	85.90	17.74
86.00	17.76	86.10	17.77	86.20	17.79	86.30	17.80	86.40	17.82
86.50	17.84	86.60	17.85	86.70	17.87	86.80	17.88	86.90	17.90
87.00	17.92	87.10	17.93	87.20	17.95	87.30	17.96	87.40	17.98
87.50	18.00	87.60	18.01	87.70	18.03	87.80	18.04	87.90	18.06
88.00	18.08	88.10	18.09	88.20	18.11	88.30	18.12	88.40	18.14
88.50	18.16	88.60	18.17	88.70	18.19	88.80	18.20	88.90	18.22
89.00	18.24	89.10	18.25	89.20	18.27	89.30	18.28	89.40	18.30
89.50	18.32	89.60	18.33	89.70	18.35	89.80	18.36	89.90	18.38

Rh.	Curr.	Rh.	Curr.	Rh.	Curr.	Rh.	Curr.	Rh.	Curr.
90.00	18.40	90.10	18.41	90.20	18.43	90.30	18.44	90.40	18.46
90.50	18.48	90.60	18.49	90.70	18.51	90.80	18.52	90.90	18.54
91.00	18.56	91.10	18.57	91.20	18.59	91.30	18.60	91.40	18.62
91.50	18.64	91.60	18.65	91.70	18.67	91.80	18.68	91.90	18.70
92.00	18.72	92.10	18.73	92.20	18.75	92.30	18.76	92.40	18.78
92.50	18.80	92.60	18.81	92.70	18.83	92.80	18.84	92.90	18.86
93.00	18.88	93.10	18.89	93.20	18.91	93.30	18.92	93.40	18.94
93.50	18.96	93.60	18.97	93.70	18.99	93.80	19.00	93.90	19.02
94.00	19.04	94.10	19.05	94.20	19.07	94.30	19.08	94.40	19.10
94.50	19.12	94.60	19.13	94.70	19.15	94.80	19.16	94.90	19.18
95.00	19.20	95.10	19.21	95.20	19.23	95.30	19.24	95.40	19.26
95.50	19.28	95.60	19.29	95.70	19.31	95.80	19.32	95.90	19.34
96.00	19.36	96.10	19.37	96.20	19.39	96.30	19.40	96.40	19.42
96.50	19.44	96.60	19.45	96.70	19.47	96.80	19.48	96.90	19.50
97.00	19.52	97.10	19.53	97.20	19.55	97.30	19.56	97.40	19.58
97.50	19.60	97.60	19.61	97.70	19.63	97.80	19.64	97.90	19.66
98.00	19.68	98.10	19.69	98.20	19.71	98.30	19.72	98.40	19.74
98.50	19.76	98.60	19.77	98.70	19.79	98.80	19.80	98.90	19.82
99.00	19.84	99.10	19.85	99.20	19.87	99.30	19.88	99.40	19.90
99.50	19.92	99.60	19.93	99.70	19.95	99.80	19.96	99.90	19.98
100.0	20.00								

TABLES FOR TEMPERATURE CHECKING

Temp.	Curr.	Temp.	Curr.	Temp.	Curr.	Temp.	Curr.	Temp.	Curr.
-20.0	4.000	-19.9	4.020	-19.8	4.040	-19.7	4.060	-19.6	4.080
-19.5	4.100	-19.4	4.120	-19.3	4.140	-19.2	4.160	-19.1	4.180
-19.0	4.200	-18.9	4.220	-18.8	4.240	-18.7	4.260	-18.6	4.280
-18.5	4.300	-18.4	4.320	-18.3	4.340	-18.2	4.360	-18.1	4.380
-18.0	4.400	-17.9	4.420	-17.8	4.440	-17.7	4.460	-17.6	4.480
-17.5	4.500	-17.4	4.520	-17.3	4.540	-17.2	4.560	-17.1	4.580
-17.0	4.600	-16.9	4.620	-16.8	4.640	-16.7	4.660	-16.6	4.680
-16.5	4.700	-16.4	4.720	-16.3	4.740	-16.2	4.760	-16.1	4.780
-16.0	4.800	-15.9	4.820	-15.8	4.840	-15.7	4.860	-15.6	4.880
-15.5	4.900	-15.4	4.920	-15.3	4.940	-15.2	4.960	-15.1	4.980
-15.0	5.000	-14.9	5.020	-14.8	5.040	-14.7	5.060	-14.6	5.080
-14.5	5.100	-14.4	5.120	-14.3	5.140	-14.2	5.160	-14.1	5.180
-14.0	5.200	-13.9	5.220	-13.8	5.240	-13.7	5.260	-13.6	5.280
-13.5	5.300	-13.4	5.320	-13.3	5.340	-13.2	5.360	-13.1	5.380
-13.0	5.400	-12.9	5.420	-12.8	5.440	-12.7	5.460	-12.6	5.480
-12.5	5.500	-12.4	5.520	-12.3	5.540	-12.2	5.560	-12.1	5.580
-12.0	5.600	-11.9	5.620	-11.8	5.640	-11.7	5.660	-11.6	5.680
-11.5	5.700	-11.4	5.720	-11.3	5.740	-11.2	5.760	-11.1	5.780
-11.0	5.800	-10.9	5.820	-10.8	5.840	-10.7	5.860	-10.6	5.880
-10.5	5.900	-10.4	5.920	-10.3	5.940	-10.2	5.960	-10.1	5.980
-10.0	6.000	-9.9	6.020	-9.8	6.040	-9.7	6.060	-9.6	6.080
-9.5	6.100	-9.4	6.120	-9.3	6.140	-9.2	6.160	-9.1	6.180
-9.0	6.200	-8.9	6.220	-8.8	6.240	-8.7	6.260	-8.6	6.280
-8.5	6.300	-8.4	6.320	-8.3	6.340	-8.2	6.360	-8.1	6.380
-8.0	6.400	-7.9	6.420	-7.8	6.440	-7.7	6.460	-7.6	6.480
-7.5	6.500	-7.4	6.520	-7.3	6.540	-7.2	6.560	-7.1	6.580
-7.0	6.600	-6.9	6.620	-6.8	6.640	-6.7	6.660	-6.6	6.680
-6.5	6.700	-6.4	6.720	-6.3	6.740	-6.2	6.760	-6.1	6.780
-6.0	6.800	-6.9	6.820	-5.8	6.840	-5.7	6.860	-5.6	6.880
-5.5	6.900	-5.4	6.920	-5.3	6.940	-5.2	6.960	-5.1	6.980
-5.0	7.000	-4.9	7.020	-4.8	7.040	-4.7	7.060	-4.6	7.080
-4.5	7.100	-4.4	7.120	-4.3	7.140	-4.2	7.160	-4.1	7.180
-4.0	7.200	-3.9	7.220	-3.8	7.240	-3.7	7.260	-3.6	7.280
-3.5	7.300	-3.4	7.320	-3.3	7.340	-3.2	7.360	-3.1	7.380
-3.0	7.400	-2.9	7.420	-2.8	7.440	-2.7	7.460	-2.6	7.480
-2.5	7.500	-2.4	7.520	-2.3	7.540	-2.2	7.560	-2.1	7.580
-2.0	7.600	-1.9	7.620	-1.8	7.640	-1.7	7.660	-1.6	7.680
-1.5	7.700	-1.4	7.720	-1.3	7.740	-1.2	7.760	-1.1	7.780
-1.0	7.800	-900	7.820	-800	7.840	-700	7.860	-600	7.880
-500	7.900	-400	7.920	-300	7.940	-200	7.960	-100	7.980
.0000	8.000	.1000	8.020	.2000	8.040	.3000	8.060	.4000	8.080
.5000	8.100	.6000	8.120	.7000	8.140	.8000	8.160	.9000	8.180
1.000	8.200	1.100	8.220	1.200	8.240	1.300	8.260	1.400	8.280
1.500	8.300	1.600	8.320	1.700	8.340	1.800	8.360	1.900	8.380
2.000	8.400	2.100	8.420	2.200	8.440	2.300	8.460	2.400	8.480
2.500	8.500	2.600	8.520	2.700	8.540	2.800	8.560	2.900	8.580
3.000	8.600	3.100	8.620	3.200	8.640	3.300	8.660	3.400	8.680
3.500	8.700	3.600	8.720	3.700	8.740	3.800	8.760	3.900	8.780
4.000	8.800	4.100	8.820	4.200	8.840	4.300	8.860	4.400	8.880
4.500	8.900	4.600	8.920	4.700	8.940	4.800	8.960	4.900	8.980
5.000	9.000	5.100	9.020	5.200	9.040	5.300	9.060	5.400	9.080
5.500	9.100	5.600	9.120	5.700	9.140	5.800	9.160	5.900	9.180
6.000	9.200	6.100	9.220	6.200	9.240	6.300	9.260	6.400	9.280
6.500	9.300	6.600	9.320	6.700	9.340	6.800	9.360	6.900	9.380
7.000	9.400	7.100	9.420	7.200	9.440	7.300	9.460	7.400	9.480
7.500	9.500	7.600	9.520	7.700	9.540	7.800	9.560	7.900	9.580
8.000	9.600	8.100	9.620	8.200	9.640	8.300	9.660	8.400	9.680
8.500	9.700	8.600	9.720	8.700	9.740	8.800	9.760	8.900	9.780
9.000	9.800	9.100	9.820	9.200	9.840	9.300	9.860	9.400	9.880
9.500	9.900	9.600	9.920	9.700	9.940	9.800	9.960	9.900	9.980

Temp.	Curr.	Temp.	Curr.	Temp.	Curr.	Temp.	Curr.	Temp.	Curr.
10.00	10.00	10.10	10.02	10.20	10.04	10.30	10.06	10.40	10.08
10.50	10.10	10.60	10.12	10.70	10.14	10.80	10.16	10.90	10.18
11.00	10.20	11.10	10.22	11.20	10.24	11.30	10.26	11.40	10.28
11.50	10.30	11.60	10.32	11.70	10.34	11.80	10.36	11.90	10.38
12.00	10.40	12.10	10.42	12.20	10.44	12.30	10.46	12.40	10.48
12.50	10.50	12.60	10.52	12.70	10.54	12.80	10.56	12.90	10.58
13.00	10.60	13.10	10.62	13.20	10.64	13.30	10.66	13.40	10.68
13.50	10.70	13.60	10.72	13.70	10.74	13.80	10.76	13.90	10.78
14.00	10.80	14.10	10.82	14.20	10.84	14.30	10.86	14.40	10.88
14.50	10.90	14.60	10.92	14.70	10.94	14.80	10.96	14.90	10.98
15.00	11.00	15.10	11.02	15.20	11.04	15.30	11.06	15.40	11.08
15.50	11.10	15.60	11.12	15.70	11.14	15.80	11.16	15.90	11.18
16.00	11.20	16.10	11.22	16.20	11.24	16.30	11.26	16.40	11.28
16.50	11.30	16.60	11.32	16.70	11.34	16.80	11.36	16.90	11.38
17.00	11.40	17.10	11.42	17.20	11.44	17.30	11.46	17.40	11.48
17.50	11.50	17.60	11.52	17.70	11.54	17.80	11.56	17.90	11.58
18.00	11.60	18.10	11.62	18.20	11.64	18.30	11.66	18.40	11.68
18.50	11.70	18.60	11.72	18.70	11.74	18.80	11.76	18.90	11.78
19.00	11.80	19.10	11.82	19.20	11.84	19.30	11.86	19.40	11.88
19.50	11.90	19.60	11.92	19.70	11.94	19.80	11.96	19.90	11.98
20.00	12.00	20.10	12.02	20.20	12.04	20.30	12.06	20.40	12.08
20.50	12.10	20.60	12.12	20.70	12.14	20.80	12.16	20.90	12.18
21.00	12.20	21.10	12.22	21.20	12.24	21.30	12.26	21.40	12.28
21.50	12.30	21.60	12.32	21.70	12.34	21.80	12.36	21.90	12.38
22.00	12.40	22.10	12.42	22.20	12.44	22.30	12.46	22.40	12.48
22.50	12.50	22.60	12.52	22.70	12.54	22.80	12.56	22.90	12.58
23.00	12.60	23.10	12.62	23.20	12.64	23.30	12.66	23.40	12.68
23.50	12.70	23.60	12.72	23.70	12.74	23.80	12.76	23.90	12.78
24.00	12.80	24.10	12.82	24.20	12.84	24.30	12.86	24.40	12.88
24.50	12.90	24.60	12.92	24.70	12.94	24.80	12.96	24.90	12.98
25.00	13.00	25.10	13.02	25.20	13.04	25.30	13.06	25.40	13.08
25.50	13.10	25.60	13.12	25.70	13.14	25.80	13.16	25.90	13.18
26.00	13.20	26.10	13.22	26.20	13.24	26.30	13.26	26.40	13.28
26.50	13.30	26.60	13.32	26.70	13.34	26.80	13.36	26.90	13.38
27.00	13.40	27.10	13.42	27.20	13.44	27.30	13.46	27.40	13.48
27.50	13.50	27.60	13.52	27.70	13.54	27.80	13.56	27.90	13.58
28.00	13.60	28.10	13.62	28.20	13.64	28.30	13.66	28.40	13.68
28.50	13.70	28.60	13.72	28.70	13.74	28.80	13.76	28.90	13.78
29.00	13.80	29.10	13.82	29.20	13.84	29.30	13.86	29.40	13.88
29.50	13.90	29.60	13.92	29.70	13.94	29.80	13.96	29.90	13.98
30.00	14.00	30.10	14.02	30.20	14.04	30.30	14.06	30.40	14.08
30.50	14.10	30.60	14.12	30.70	14.14	30.80	14.16	30.90	14.18
31.00	14.20	31.10	14.22	31.20	14.24	31.30	14.26	31.40	14.28
31.50	14.30	31.60	14.32	31.70	14.34	31.80	14.36	31.90	14.38
32.00	14.40	32.10	14.42	32.20	14.44	32.30	14.46	32.40	14.48
32.50	14.50	32.60	14.52	32.70	14.54	32.80	14.56	32.90	14.58
33.00	14.60	33.10	14.62	33.20	14.64	33.30	14.66	33.40	14.68
33.50	14.70	33.60	14.72	33.70	14.74	33.80	14.76	33.90	14.78
34.00	14.80	34.10	14.82	34.20	14.84	34.30	14.86	34.40	14.88
34.50	14.90	34.60	14.92	34.70	14.94	34.80	14.96	34.90	14.98
35.00	15.00	35.10	15.02	35.20	15.04	35.30	15.06	35.40	15.08
35.50	15.10	35.60	15.12	35.70	15.14	35.80	15.16	35.90	15.18
36.00	15.20	36.10	15.22	36.20	15.24	36.30	15.26	36.40	15.28
36.50	15.30	36.60	15.32	36.70	15.34	36.80	15.36	36.90	15.38
37.00	15.40	37.10	15.42	37.20	15.44	37.30	15.46	37.40	15.48
37.50	15.50	37.60	15.52	37.70	15.54	37.80	15.56	37.90	15.58
38.00	15.60	38.10	15.62	38.20	15.64	38.30	15.66	38.40	15.68
38.50	15.70	38.60	15.72	38.70	15.74	38.80	15.76	38.90	15.78
39.00	15.80	39.10	15.82	39.20	15.84	39.30	15.86	39.40	15.88
39.50	15.90	39.60	15.92	39.70	15.94	39.80	15.96	39.90	15.98

Temp.	Curr.	Temp.	Curr.	Temp.	Curr.	Temp.	Curr.	Temp.	Curr.
40.00	16.00	40.10	16.02	40.20	16.04	40.30	16.06	40.40	16.08
40.50	16.10	40.60	16.12	40.70	16.14	40.80	16.16	40.90	16.18
41.00	16.20	41.10	16.22	41.20	16.24	41.30	16.26	41.40	16.28
41.50	16.30	41.60	16.32	41.70	16.34	41.80	16.36	41.90	16.38
42.00	16.40	42.10	16.42	42.20	16.44	42.30	16.46	42.40	16.48
42.50	16.50	42.60	16.52	42.70	16.54	42.80	16.56	42.90	16.58
43.00	16.60	43.10	16.62	43.20	16.64	43.30	16.66	43.40	16.68
43.50	16.70	43.60	16.72	43.70	16.74	43.80	16.76	43.90	16.78
44.00	16.80	44.10	16.82	44.20	16.84	44.30	16.86	44.40	16.88
44.50	16.90	44.60	16.92	44.70	16.94	44.80	16.96	44.90	16.98
45.00	17.00	45.10	17.02	45.20	17.04	45.30	17.06	45.40	17.08
45.50	17.10	45.60	17.12	45.70	17.14	45.80	17.16	45.90	17.18
46.00	17.20	46.10	17.22	46.20	17.24	46.30	17.26	46.40	17.28
46.50	17.30	46.60	17.32	46.70	17.34	46.80	17.36	46.90	17.38
47.00	17.40	47.10	17.42	47.20	17.44	47.30	17.46	47.40	17.48
47.50	17.50	47.60	17.52	47.70	17.54	47.80	17.56	47.90	17.58
48.00	17.60	48.10	17.62	48.20	17.64	48.30	17.66	48.40	17.68
48.50	17.70	48.60	17.72	48.70	17.74	48.80	17.76	48.90	17.78
49.00	17.80	49.10	17.82	49.20	17.84	49.30	17.86	49.40	17.88
49.50	17.90	49.60	17.92	49.70	17.94	49.80	17.96	49.90	17.98
50.00	18.00	50.10	18.02	50.20	18.04	50.30	18.06	50.40	18.08
50.50	18.10	50.60	18.12	50.70	18.14	50.80	18.16	50.90	18.18
51.00	18.20	51.10	18.22	51.20	18.24	51.30	18.26	51.40	18.28
51.50	18.30	51.60	18.32	51.70	18.34	51.80	18.36	51.90	18.38
52.00	18.40	52.10	18.42	52.20	18.44	52.30	18.46	52.40	18.48
52.50	18.50	52.60	18.52	52.70	18.54	52.80	18.56	52.90	18.58
53.00	18.60	53.10	18.62	53.20	18.64	53.30	18.66	53.40	18.68
53.50	18.70	53.60	18.72	53.70	18.74	53.80	18.76	53.90	18.78
54.00	18.80	54.10	18.82	54.20	18.84	54.30	18.86	54.40	18.88
54.50	18.90	54.60	18.92	54.70	18.94	54.80	18.96	54.90	18.98
55.00	19.00	55.10	19.02	55.20	19.04	55.30	19.06	55.40	19.08
55.50	19.10	55.60	19.12	55.70	19.14	55.80	19.16	55.90	19.18
56.00	19.20	56.10	19.22	56.20	19.24	56.30	19.26	56.40	19.28
56.50	19.30	56.60	19.32	56.70	19.34	56.80	19.36	56.90	19.38
57.00	19.40	57.10	19.42	57.20	19.44	57.30	19.46	57.40	19.48
57.50	19.50	57.60	19.52	57.70	19.54	57.80	19.56	57.90	19.58
58.00	19.60	58.10	19.62	58.20	19.64	58.30	19.66	58.40	19.68
58.50	19.70	58.60	19.72	58.70	19.74	58.80	19.76	58.90	19.78
59.00	19.80	59.10	19.82	59.20	19.84	59.30	19.86	59.40	19.88
59.50	19.90	59.60	19.92	59.70	19.94	59.80	19.96	59.90	19.98

ACCESSORIES

HI 7102	Mini-calibration RH chamber, complete with O-ring and pre-calibrated saturated salts (LiCl and NaCl)
HI 7111/P	Spare saturation salts 6 x 15 g bottles of LiCl for low range humidity calibration
HI 7121/P	Spare saturation salts 6 x 33 g bottles of NaCl for high humidity calibration
HI 7164	Undecal connector
HI 710011	Sintered cap for RH probe
MAN8666R1	Instruction manual

WARRANTY

HI8666 is warranted for one year against defects in workmanship and materials when used for its intended purpose and maintained according to instructions.

This warranty is limited to repair or replacement free of charge.

Damages due to accidents, misuse, tampering or lack of prescribed maintenance are not covered.



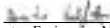
If service is required, contact the dealer from whom you purchased the instrument. If under warranty, report the model number, date of purchase, serial number and the nature of the failure. If the repair is not covered by the warranty, you will be notified of the charges incurred. If the instrument is to be returned to Hanna Instruments, first obtain a Returned Goods Authorization Number from the Customer Service department and then send it with shipments costs prepaid. When shipping any instrument, make sure it is properly packaged for complete protection.

To validate your warranty, fill out and return the enclosed warranty card within 14 days from the date of purchase.

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Hanna Instruments reserves the right to modify the design, construction and appearance of its products without advance notice.

CE DECLARATION OF CONFORMITY

								
 DECLARATION OF CONFORMITY								
We Hanna Instruments Srl V.le delle industrie 12 35010 Ronchi di Villafranca (PD) ITALY								
herewith certify that the RH/C transmitter HI 8666								
has been tested and found to be in compliance with the following regulations:								
<table><tr><td>IEC 801-2</td><td>Electrostatic Discharge</td></tr><tr><td>IEC 801-3</td><td>RF Radiated</td></tr><tr><td>IEC 801-4</td><td>Fast Transient</td></tr><tr><td>EN 55022</td><td>Radiated, Class B</td></tr></table>	IEC 801-2	Electrostatic Discharge	IEC 801-3	RF Radiated	IEC 801-4	Fast Transient	EN 55022	Radiated, Class B
IEC 801-2	Electrostatic Discharge							
IEC 801-3	RF Radiated							
IEC 801-4	Fast Transient							
EN 55022	Radiated, Class B							
Date of Issue: <u>12-02-1996</u>	 D.Volpato - Engineering Manager On behalf of Hanna Instruments S.r.l.							

Recommendations for Users

Before using this product, make sure that it is entirely suitable for the environment in which it is used.

Operation of this instrument in residential area could cause unacceptable interferences to radio and TV equipments, requiring the operator to take all necessary steps to correct interferences.

Any variation introduced by the user to the supplied equipment may degrade the instrument's EMC performance.

To avoid damages or burns, do not place this transmitter in microwave ovens.



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