

Instruction Manual

No.1518-00 Wooden Base Psychrometer

Thank you for purchasing the Wooden Base Psychrometer.

- This product is designed to measure indoor temperature and relative humidity. Do not use it for any other purposes.
- Read this manual thoroughly before using. Keep the manual in a safe place for future references whenever necessary.

Specifications

Measuring range	:	-30 to +50°C
Min. graduation	:	1°C
Accuracy	:	±1°C within 0 to +30°C ±2°C for other ranges
Materials	:	Base: Wood Thermometer: Glass
Sensing element	:	Kerosene
Dimensions	:	79(W) x 271(H) x 29(D) mm
Weight	:	125 g

Cautions

1. The operation ambient is 0 to 35°C. Use this psychrometer within this range.
2. The psychrometer is delicately made. Be careful not to drop or give shocks to it.
3. Do not install the unit subject to direct sunlight.
4. Fill the water reservoir with water. Make sure that the gauze of the wet bulb on the right thermometer is inserted into the water reservoir so that the gauze can always get wet.
5. At replacing the old gauze to the new one, use gauze made of cotton fiber without starch.
6. The dry bulb thermometer on the left shows atmospheric temperature.

How to read temperature

When you read the temperature, your eyes are (at right angle) level to the thermometer and the top of mercury level.

How to determine the R. Humidity

When the dry bulb temperature indicates 18°C and the wet bulb temperature indicates 15°C, the difference between the wet and dry temperatures is 3.0 (18.0 – 15.0 = 3.0).

Refer to the humidity conversion chart.

Read the across the top of the chart to 3.0 (difference) and the side of the chart to 18 (dry bulb temperature). The intersection of the column 3.0 and the row 18 shows 71. The relative humidity is 71%.

SATO KEIRYOKI MFG. CO., LTD.

3-4, Kanda-kajicho, Chiyoda-ku, Tokyo 101-0045 Japan

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R. Humidity Conversion Chart

Dry bulb °C	Temperature difference between the dry bulb and wet bulb (ice free)															
	0.5	1.0	1.5	2.0	2.5	3.0	3.5	4.0	4.5	5.0	5.5	6.0	6.5	7.0	7.5	8.5
35	97	93	90	87	84	80	77	74	71	68	65	63	60	57	55	49
34	97	93	90	86	84	80	77	74	71	68	65	62	59	56	54	48
33	96	93	90	86	84	80	76	73	70	67	64	61	58	56	53	47
32	96	93	90	86	83	79	76	73	70	66	63	61	58	55	52	46
31	96	93	89	86	83	79	75	72	69	66	63	60	57	54	51	45
30	96	92	89	85	83	78	75	72	68	65	62	59	56	53	50	44
29	96	92	89	85	82	78	74	71	68	64	61	58	55	52	49	43
28	96	92	89	85	82	77	74	70	67	64	60	57	54	51	48	42
27	96	92	89	84	82	77	73	70	66	63	59	56	53	50	47	40
26	96	92	88	84	81	76	73	69	65	62	58	55	52	48	45	39
25	96	92	88	84	81	76	72	68	65	61	57	54	51	47	44	38
24	96	91	88	83	80	75	71	68	64	60	56	53	49	46	43	36
23	96	91	87	83	80	75	71	67	63	59	55	52	48	45	41	34
22	96	91	87	82	79	74	70	66	62	58	54	50	47	43	39	32
21	95	91	87	82	79	73	69	65	61	57	53	49	45	42	38	31
20	95	91	86	81	78	73	68	64	60	56	52	48	44	40	36	29
19	95	90	86	81	78	72	67	63	59	54	50	46	42	38	34	26
18	95	90	86	80	77	71	66	62	57	53	49	44	40	36	32	24
17	95	90	85	80	77	70	65	61	56	51	47	43	38	34	30	22
16	95	89	85	79	76	69	64	59	55	50	45	41	36	32	28	19
15	95	89	84	78	75	68	63	58	53	48	44	39	34	30	25	16
14	94	89	84	78	74	67	62	57	51	46	42	37	32	27	23	13
13	94	88	83	77	74	66	60	55	50	45	39	34	29	25	20	10
12	94	88	83	76	73	65	59	53	48	43	37	32	27	22	17	7
11	94	87	82	75	72	63	57	52	46	40	35	29	24	19	11	3
10	94	87	82	74	71	62	56	50	44	38	32	27	21	16	10	
9	93	86	81	73	70	60	54	48	42	36	30	24	18	12	6	
8	93	86	80	72	69	59	52	46	39	33	27	20	14	8	2	
7	93	85	79	71	68	57	50	43	37	30	24	17	14	4		
6	92	85	79	70	66	55	48	41	34	27	20	13	7	0		
5	92	84	78	68	65	53	46	38	31	24	16	9	2			
4	92	83	77	67	63	51	43	35	28	20	12	5				
3	91	82	76	65	62	49	40	32	24	16	8	1				
2	91	82	75	64	60	46	37	29	20	12	4					
1	91	81	73	62	58	43	34	25	16	8						
0	90	80	72	60	56	40	31	21	12	3						

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