.1 YEAR
WARRANTY
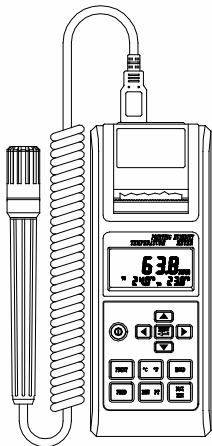CE
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User's Guide

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RH1362P
Printing Humidity / Temperature Meter

M4925/0510

I. SAFETY INFORMATION

❑ Read the following safety information carefully before attempting to operate or service the meter.
❑ Use the meter only as specified in this manual; otherwise, the protection provided by the meter may be impaired.
❑ Caution when working with voltages above 60VDC or 24VAC RMS. Such voltages pose a shock hazard.

Environment conditions

① Altitude up to 2000 meters
② Indoor use only
③ Relatively humidity 95% max.
④ Operation Temperature 0 ～ 50℃ (32℉～122℉)

Maintenance & Clearing

① Repairs or servicing not covered in this manual should only be performed by qualified personnel.

② Periodically wipe the case with a dry cloth. Do not use abrasives or solvents on this instrument.

Safety symbols

CE   Comply with EMC

II. SPECIFICATIONS

2-1 General Information

Display：	Triple 4 digit LCD.
Over Range Indication ：	- 𝟬𝗟 - appears.
Low Battery Indication ：	BT shows up when the battery's voltage is below the operating voltage.
Sampling Rate：	about 1 time per second
Power Requirement：	6pcs 1.5V size AAA alkaline batteries or 9V AC Adaptor /500mA minimum.
Battery Life ：	Approx. 90 hours. (interval printing = 60 minutes, excluding beeper). 100 hours (without printing & beeper).
Printing Interval：	6 sec to 59 min 59 sec
Operating Temperature and Humidity：	0℃ to 50℃ (32℉ to 122℉) below 95% RH
Storage Temperature and Humidity：	-10℃ to 60℃ (14℉ to 140℉) below 70% RH
Dimensions (Meter)：	193 (L) × 74 (W) × 37(H) mm
(Probe)：	160 (L) × 13 (D) mm /1m cable
Weight：	Approx. 430g with batteries & thermo-paper.
Accessories ：	Carrying case, Instruction manual, Batteries, 2 Rolls of thermo-paper, type K probe.
Printer：	Thermo-printing type with 16 characters per line using 38mm width plain thermo-paper.

2-2 Electrical Specifications

Humidity :
    Range : 10%RH to 95%RH
    Resolution : 0.1%RH
    Accuracy : ±3%RH from 30%RH to 95%RH
                    ±5%RH from 10%RH to 30%RH

Temperature (T1) :
    Range : -20℃ to +60℃ (-4℉ to +140℉)
    Resolution : 0.1℃ / 0.1℉
    Accuracy : ±0.8℃ , ±1.5℉

Dew Point :
    Range : -44.0℃ ~ 58.5℃ (-47.2℉ ~ 137.3℉)
    Accuracy : 1.0℃/1.8℉

Temperature (T2) :
    Range : -200℃ to +1333℃ (-328℉ to +2431℉)
    Resolution : 0.1℃ form -200℃ to 999℃
                    0.1℉ from -328℉ to 999.9℉, other is 1℃ , 1℉

Accuracy : -50℃ ~ -200℃:   ±(0.2%rdg + 1.8℃)
               -50℃ ~ 500℃:   ±(0.1%rdg + 0.8℃)
               500℃ ~ 1333℃:   ±(0.2%rdg + 1.8℃)
               -58℉ ~ -328℉:   ±(0.2%rdg + 3℉)
               -58℉ ~ 1000℉:   ±(0.1%rdg + 1.6℉)
               1000℉ ~ 2431℉:   ±(0.2%rdg + 3℉)

Temperature Coefficient :
    0.1 times the applicable accuracy specification per ℃ from 0℃
    to 18℃ and 28℃ to 50℃ (32℉ to 64℉ and 82℉ to 122℉)

III.   NAME OF PARTS AND POSITION
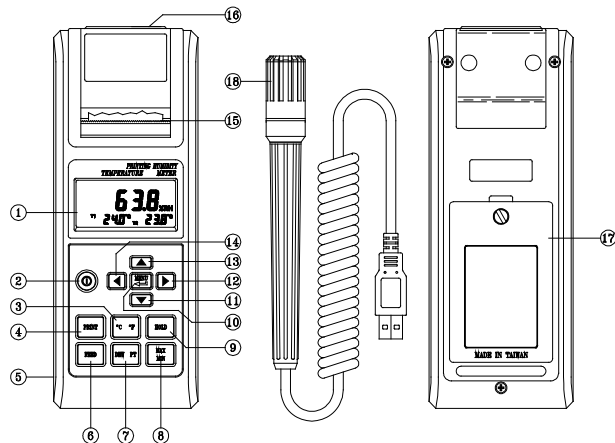
Fig-1

1. LCD：Measured values, unit ,symbols, and decimal points
    are displayed.

2. ⊙ ：Key for power on/off

3. ℃ ℉ ：Key for exchanging temperature unit ℃and ℉.

4. PRINT :
    ① Key for start printing current data. The format as below:
    LINE 1   20：12：01   02 - 21
    LINE 2   58.9   % RH
    LINE 3   td   15. 7   ℃
    LINE 4   T1   24. 3   ℃
    LINE 5   T2   24. 8   ℃

Line 1 : printing time hour: minute: second, month- day.
Line 2 : printing humidity value.
Line 3 : printing Dew point value.
Line 4 : printing T1 temperature value.
Line 5 : printing T2 temperature value (K-Type).
② Press this button for 2 seconds, the printer will enter interval printing status, and won't stop unless this button is pressed again or FEED button is pressed.

5. DC 9V AC adaptor input jack. ⊕━C━⊖

6. FEED PAPER (Fig-2) :
① Key for moving forward thermo-paper one line.
② Perform force stop printing, and skip any printing data.

7. DEW-POINT :Key for changing humidity to dew-point display.

8. MAX / MIN : Fig-2 →
① Press this key one time to enter maximum /minimum record mode, the "REC" symbol is displayed.
② Press this key to display the maximum reading ("MAX REC" symbol displayed), the minimum reading ("MIN REC" symbol displayed) and the current reading ("REC" symbol displayed) in cycle.
③ Press this key 2 seconds to exit this mode.

9. HOLD : Key for holding the display reading and press again to exit.

10. 〔MENU〕 : Key for start/stop set-up parameters mode.
Parameters (in sequence):
ON/OFF (interval printing enable or disable).
TIME INTV (printing interval ranging from 00m:06s to 59m:59s).
INTV▶ (Interval printing start time ranging from 00h:00m to 23h:59m).
INTV ■ (Interval printing stop time ranging from 00h:00m to 23h:59m).
TIME (Calendar setting year, month, day, hour, minute).

11. ▼ DOWN : Key for decreasing the value of parameters.
12. ▶ RIGHT : Key for moving to the desired next parameter setting.
13. ▲ UP : Key for increasing the value of parameters setting.
14. ◀ LEFT : Key for moving to the desired forward parameter setting.
15. Way out for thermo-paper.
16. Type K temperature probe jack.
17. Battery cabinet and cover :
6 pcs 1.5V size AAA alkaline batteries.
18. Humidity (including temperature) probe.

LCD DISPLAY :
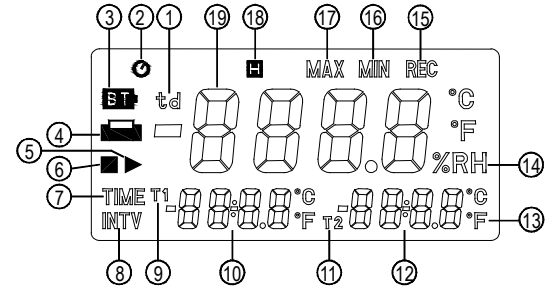
Fig-3

1. Dew point measurement indicator.
2. Preset interval printing function ON indicator.
3. Low battery indicator
4. Printing indicator.
5. Interval printing start time setting indicator.
6. Interval printing stop time setting indicator.
7. Calendar time indicator.

8. Interval printing time indicator.
9. T1 measurement indicator.
10. T1 measured value (NTC).
11. T2 measurement indicator.
12. T2 measured value (Type K).
13. Temperature measurement units.
14. Humidity measurement unit.
15. Recording indicator.
16. Minimum measurement value indicator.
17. Maximum measurement value indicator.
18. Data hold indicator.
19. Humidity and dew point temperature measured value.

IV.   PRECAUTIONS AND PREPARATIONS FOR MEASUREMENT

1. Before operating this instrument, please examine it to make sure no shipping damage occurred.
2. Save all packing materials until you are sure that this unit can normally operate.
3. Be sure the batteries are correctly placed in the case or the 9V adaptor is in correct connection.
4. An unsecured battery cover will cause error measuring.
5. To avoid battery leakage problem, remove batteries if this meter will not be used for a long time.
6. Do not use or store this meter outside the operating / storage environment.

V.   OPERATING PROCEDURE

1. This meter can be supplied with batteries or DC 9V AC adaptor. If using batteries :

   Remove the rear cover, and install batteries. Pay attention to the polarity of battery socket. If using 9V adaptor, make sure there is a good connection to the adaptor socket of the meter. Choose the K-type temperature probe for your application and insert it into T2 the temperature probe socket. Insert Humidity/Temperature (T1) probe into T1 the meter socket.

2. Press the ⏻ button to power on the meter, the current date and time will be displayed in about 3 seconds. If "- - -" appears, it indicates no probe or the probe is broken.

3. T1 indicates room temperature, T2 indicates K-type thermocouple test value.

4. Printing data :
   ① Press PRINT one time to print one set data.
   ② If continuous printing is required, press and hold down PRINT button, until LCD display "INTV" mark and enter continuous interval printing mode, the printer will print data, as follows :

INTV	00 : 06	→ Interval printing time, minute : second.
10：55：19	08-16	→ Printing time, hour:minute:second, month:day
	62.7 %RH	→ Humidity test value and unit.
td	19.8 ℃	→ Dew point and unit.
T1	27.6 ℃	→ Room temperature test value and unit.
T2	26.5 ℃	
10：55：25	08-16	
	62.7 %RH	
td	19.8 ℃	
T1	27.6 ℃	
T2	26.5 ℃	

```
10：55：31    08-16
             62.7  %RH
td       19.8  ℃
T1       27.6  ℃
T2       26.5  ℃
10：55：37    08-16
             62.7  %RH
td       19.8  ℃
T1       27.6  ℃
T2       26.5  ℃
```

Press PRINT or FEED key to exit printing mode.

③ When the meter is powered on, if the printing function setting is "ON", and now time is interval printing start time, the meter will enter to continuous interval printing mode and start printing.

　※ Press PRINT or FEED key to exit printing mode.

　※ The interval printing function works only when the start printing time is earlier than the stop printing time, and interval print time can not be longer than 24 hours.

Caution : Before printing, please check thermo-paper is not clipped by thermo-paper cover, if anything interrupts the printer, the meter will shut off the printer power, and " ▬ " symbol flickers.

VI. SETTING MODE

Press " MENU " button to enter setting function, re-press this button will select setting parameters in circle (printer on or off, interval printing time, start printing time, stop printing time and calendar setting). The modifier parameter will flicker until the setting is finished. Press ◀ or ▶ button to select parameter setting, press ▲ or ▼ button to increase or decrease the parameter.

Parameter setting in sequence and LCD display as follows :

1.   Printing function ON or OFF select.

fig-4

2.   Interval printing "second" parameter setting.

fig-5

3.   Interval printing "minute" parameter setting.

fig-6

4.   Printing start time "minute" parameter setting.

⊘

▶

TIME   07:02

fig-7

5.   Printing start time "hour" parameter setting.

⊘

▶

TIME   07:02

fig-8

6.   Printing stop time "minute" parameter setting.

⊘

■

TIME   13:04

fig-9

7.   Printing stop time "hour" parameter setting.

⊘

■

TIME   13:04
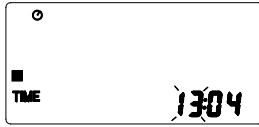
fig-10

8.   Calendar "minute" parameter setting.

⊘

2000

TIME   08-17   16:08

fig-11

-11-

9.   Calendar "hour" parameter setting.

⊘

2000

TIME   08-17   16:08

fig -12

10.   Calendar "day" parameter setting.

⊘

2000

TIME   08-17   16:08

fig –13

11.   Calendar "month" parameter setting.

⊘

2000

TIME   08-17   16:08

fig -14

12.   Calendar year last two digit parameter setting.

⊘

2000

TIME   08-17   16:08

fig –15

When you finish the setting, press " [MENU ←] " key to get back to the measurement mode.

-12-

VII. HOW TO SETUP INTERVAL PRINT

❑ Setup interval print with 24 hours limitation.

1. Press ⬛ key to enter setting mode, setting print operation is ON.

2. Select interval printing time setting mode, set "second", "minute" (from 00 : 06 to 59 : 59).

3. Select start printing time setting mode, set "minute", "hour" (from 00 : 00 to 23 : 59).

4. Select stop printing time setting mode, set "minute", "hour" (from 00 : 00 to 23 : 59).

5. When you finish the setting, press ⬛ key to exit the setting mode, LCD will display "⊘" mark at left upper corner.

Note : The start time must be earlier than the stop time, otherwise the buzzer will beep warning that the setting is in error and did not accept the setting. If this occurs, press ⬛ key.

VIII. USER FRIENDLY CALIBRATION PROCEDURE

❑ Use standard humidity meter to verify the reading.

1. Press and hold down "⬛" key, the press " ⓞ " key turn on the meter until the LCD show the "SET %RH" symbol.

2. Press "▲" and "▼" keys until the LCD value is same as the standard humidity meter.

3. Press "⬛" key to store the calibrated value.

IX. BATTERY REPLACEMENT

1. When battery power is not sufficient, ▮▮ will be shown on LCD. Replace with 6 pcs new of 1.5V size AAA batteries.

2. After the temperature probe is disconnected and the meter is powered off, remove the battery cover.

3. Remove batteries from the holder and replace them with 6 pcs of new 1.5V size AAA alkaline batteries.

4. Secure the battery cover.

WARRANTY/DISCLAIMER

OMEGA ENGINEERING, INC. warrants this unit to be free of defects in materials and workmanship for a period of **13 months** from date of purchase. OMEGA's WARRANTY adds an additional one (1) month grace period to the normal **one (1) year product warranty** to cover handling and shipping time. This ensures that OMEGA's customers receive maximum coverage on each product.

If the unit malfunctions, it must be returned to the factory for evaluation. OMEGA's Customer Service Department will issue an Authorized Return (AR) number immediately upon phone or written request. Upon examination by OMEGA, if the unit is found to be defective, it will be repaired or replaced at no charge. OMEGA's WARRANTY does not apply to defects resulting from any action of the purchaser, including but not limited to mishandling, improper interfacing, operation outside of design limits, improper repair, or unauthorized modification. This WARRANTY is VOID if the unit shows evidence of having been tampered with or shows evidence of having been damaged as a result of excessive corrosion; or current, heat, moisture or vibration; improper specification; misapplication; misuse or other operating conditions outside of OMEGA's control. Components in which wear is not warranted, include but are not limited to contact points, fuses, and triacs.

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The purchaser is responsible for shipping charges, freight, insurance and proper packaging to prevent breakage in transit.

FOR **WARRANTY** RETURNS, please have the following information available BEFORE contacting OMEGA:

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2. Model and serial number of the product under warranty, and
3. Repair instructions and/or specific problems relative to the product.

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1. Purchase Order number to cover the COST of the repair,
2. Model and serial number of the product, and
3. Repair instructions and/or specific problems relative to the product.

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