**SPECIFICATION**

**SENSOR SPECIFICATIONS**

Relative Humidity Accuracy Ranges:
- 5% to 95% RH: ±2% RH
- 95% to 100% RH: ±3% RH
- 100% to 100% RH: ±3% RH

Hysteresis: ±1% RH

Response Time: 5 to 10 sec.

Repeatability: ±0.1% RH

Resolution: 0.1% RH

**Temperature Accuracy Range:**

- 0°F to 50°F (−18°C to 10°C): ±0.5°F
- 5°F to 122°F (−15°C to 50°C): ±1°F
- 122°F to 158°F (50°C to 70°C): ±1.5°F

**Output Specifications**

- 4-digit, 9-segment LED
- +2°F High Alarm i.e. Process Value > Setpoint 1 Value +2°F will activate Alarm 1.
- Normally Open (NO)
- Active Above
- Enable at power-on
- Relay 250 Vac @ 3 A Resistive Load, SSR, Pulse, Analog Voltage and Current

**WARRANTY DISCLAIMER**

OMEGA ENGINEERING, INC. warrants the products to be free of defects in material and workmanship for a period of four (4) years from the date of shipment, unless otherwise specified.* OMEGA assumes no responsibility for failures of the equipment resulting from any cause other than defects in material or workmanship. The sole remedy for failure shall be repair or replacement of the equipment at OMEGA’s option. The equipment must be returned for repair or replacement, freight prepaid, to OMEGA at the original purchase price. This warranty is void if the equipment has been subject to misuse, abuse, or unauthorized alteration or repair. OMEGA will not be liable for any loss of revenue or other costs arising out of the equipment’s failure.

*For products not RoHS 2 Compliant, warranty is four (4) years from the date of shipment.

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**WARNING:**

These products are not designed for use in life support applications and should not be used for patient care environments.

**PRODUCT USE & LIABILITY WARNING:**

OMEGA Engineering, Inc. will not be held liable for any losses, costs, or damages arising out of the use or misuse of this device, its parts, or its accessories. OMEGA Engineering, Inc. reserves the right to change any product it carries, and reserves the rights to alter specifications without notification.

**RETURN REQUESTS:**

OMEGA may review a request for return if the product was defective at the time of shipment. Return requests must be received within 30 days of the invoice date. The customer must pre-pay shipping charges for return to OMEGA. OMEGA will not be responsible for any equipment returned by the customer which is not properly packaged for shipment.

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For quick start, RoHS 2 Compliant

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**S afety C onsiderations**

This device is marked with the international Caution symbol.

The instrument is a panel mount device protected in accordance with EN61010-1:2001. Remember that the unit has no power-on switch. Building installation should include a switch or circuit-breaker that must be compliant to IEC 947-1 and 947-3.

**Safety:**
- Do not exceed voltage rating on the label located on the top of the instrument housing.
- Always disconnect power before changing signals and power connections.
- Do not use this instrument on a work bench without its safety legs.
- Do not operate this instrument in flammable or explosive atmospheres.
- Do not expose this instrument to rain or moisture.

**E M C:**
- Whenever EMC is an issue, always use shielded cables.
- Never run signal and power wires in the same conduit.
- Use shield wire connections with twisted-pair cables.
- Install Ferrite Bead(s) on signal wire close to the instrument if EMC problems persist.

**M un t Ing P anel M un ting I ns tr ucti on:**
1. Using the dimensions from the panel cutout shown in exploded views, cut an opening in the panel. 45mm X 651.00 square with R 1.5, 4 places (1.772” X 254.00” square with R 0.06”, 4 places)
2. Insert the unit into the front of the panel, so the gasket seals between the bezel and the front of the panel.
3. Slide the retainer over the rear of the case and tighten against the backside of the mounting panel.

**D isassembly I ns tr ucti on:**
If necessary, the unit may be removed from the panel and opened.

**W arning: Disconnect all ac power from the unit before proceeding.**
1. Make sure the AC power is disconnected.
2. Remove all wiring connections from the rear of the meter. To remove power and input connectors squeeze top and bottom of the case near the connector site for release, then pull connectors from the case.
3. To remove meter from the case, squeeze top and bottom of bezel to release, then pull from case.

**Wiring**
Wire the instrument according to the figure shown below.

**W arning: Do not connect ac power to your device until you have completed all input and output connections. This device must only be installed by a qualified technician with corresponding qualifications. Failure to follow all instructions and warnings may result in injury!**

**M e n u C onfigurat i on M ode**

The instrument has two different modes of operation: Run Mode and Program Mode.

**Run Mode**
- In the Run Mode, pressing the enter button changes selections. When a numerical value is displayed press the button to scroll through "flashing" selections. When a numerical value is displayed press the button for approximately 3 seconds will speed up the rate at which the setpoint value is decremented.
- Press the down button to go back to a previous Top Level Menu item.
- Press this button twice to reset the controller to the Run Mode.
- While a numerical value is flashing (except set point value) press to scroll digits from left to right allowing the user to select the desired digit to modify. When a set point value is displayed press the button to decrease value of a setpoint that is currently being modified. Pressing the button for approximately 3 seconds will speed up the rate at which the setpoint value is decremented.
- In the Run Mode, pressing the button changes display from RH readings to Temperature readings.

**Program Mode**
- Press to store a sub menu or to enter a value - the display will flash a message to confirm your selection.
- In the Run Mode, press twice to enable Standby Mode with flashing.

**Configurat i on F low Ch art**

It is required that you put the controller in Standby Mode for any configuration changes other than Setpoints and Alarms.

* * if unit is equipped with option.

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**Fl ow C h art**

Connect the main power connections as shown in the figure below.

**D e s c ri pt i on of F ront P anel**

The upper display may be RH, Temperature or Dewpoint depending on your Reading Configuration selections. Factory defaults are shown. The Dual Display allows the user to observe the Relative Humidity or Dewpoint (upper display) and Temperature Value (lower display), at the same time.

**Rel at i ve H umidity U pper D isplay**

- Temperature
- Lower Display

**M en u C onfigurat i on M ode**

- To enter the Menu, the user must first press 
- Use this button to advance/navigate to the next menu option. The user may navigate through all the top level menus by pressing 
- While a parameter is being modified, press to escape without saving the parameter.
- Press the up button to scroll through "flashing" selections. When a numerical value is displayed press this key to increase value of a parameter that is currently being modified.
- Pressing the button for approximately 3 seconds will speed up the rate at which the set point value is decremented.
- In the Run Mode, pressing the button changes display from RH readings to Temperature readings.
- Press the down button to go back to a previous Top Level Menu item.
- Press this button twice to reset the controller to the Run Mode.
- While a numerical value is flashing (except set point value) press to scroll digits from left to right allowing the user to select the desired digit to modify. When a set point value is displayed press the button to decrease value of a setpoint that is currently being modified. Pressing the button for approximately 3 seconds will speed up the rate at which the setpoint value is decremented.
- In the Run Mode, pressing the button changes display from RH readings to Temperature readings.
- Press to store a sub menu or to enter a value - the display will flash a message to confirm your selection.
- In the Run Mode, press twice to enable Standby Mode with flashing.