

# MK II - Digital, Indicating, Proportional Temperature Control

## Digital, Indicating, Proportional Temperature Control



### Features:

- Phase Angle Control Mode
- 4 Digit Pt/ST Display
- 1000W Power Thyristor Output (call us for higher power heater option)
- Accuracy:  $\pm 0.1\%$  Full Scale
- Sensor Input: Platinum RTD-100ohm
- Ranges:  $-190^{\circ}\text{F}$  to  $+1000^{\circ}\text{F}$  or  $-190^{\circ}\text{C}$  to  $650^{\circ}\text{C}$
- Recorder Outputs (Ma/Mv)
- Order Platinum RTD probes separately under [Temperature Probes](#)
- **LED 4-digit Display:** Oversize display allows instant user choice of Process Temp. or Set Temp by manual switch or selection or exclusive automatic alternative action solid state switching of PT/ST display.
- **Recorder Output:** Exclusive circuit design allows selection of 0-1MaFS for use with economical chart recorders or high accuracy 10MV/ $^{\circ}\text{F}$  for use with potentiometric chart recorders.
- **Exclusive Power Limit Controls:** Ensures stable straight line response for the output thyristor and fixed proportional bandwidth on most systems.
- **Output Indicator Lights:** Give indication of system power output at a glance, and assist in system setup and tuning for a straight line control response at the setpoint.
- **Heater Load Capability:** is conservatively rated at 1000 watts total. The triac adjusts the flow of AC power to resistive type heating devices ONLY. (call us for higher power heater options).
- **Setpoint Control:** 15 turn Potentiometer device provides high accuracy and resolution of set temperature adjustments.
- **Plug and Play Ready:** Just plug in the probe and heater and you are ready to control your process.

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The DynaSense<sup>®</sup> MK II is a digital indicating proportional temperature control that allows instant system setup and provides control action. The infinitely proportional control of the power thyristor conduction phase angle adjusts the instantaneous output power available to the system heating elements and results in a classic straight line system response curve at the setpoint temperature. The high accuracy digital converter provides continuous precise temperature indication. The Resistance vs. Temperature change of the Platinum RTD probe is amplified by a complex solid state assembly, which controls the conduction angle of the output thyristor in direct proportion to the system demand and deviation from the setpoint temperature. Typical control accuracy to  $\pm 0.02^{\circ}\text{F}$ . Indicating accuracy is  $\pm 0.1\%$  full scale,  $\pm 1$  digit.