



HVAC Nodes (top left to right) - MT-504, MT-508, MT-512

Micro Thermo's HVAC controllers are designed to control various HVAC systems for supermarket applications. Rather than requiring a separate building management system, the MT HVAC application is integrated with the MT Alliance™ system to provide a single, unified application for refrigeration, HVAC and lighting.

The MT-500 series of control boards, known as "nodes", can support, among other things, Roof-Top Units (RTU), Air Handler Units (AHU) and Dual-Path Units (DPU) from various vendors in sizes ranging from 2 tons up to 100 tons. Based on the number of relay outputs needed (4, 8 or 12) an MT-504, MT-508 or MT-512 board is utilized. The board can be factory or field-installed.

Micro Thermo provides an MT Alliance software tool for configuration, setup and operation of RTU, AHU and DPU equipment. This provides you with a wide range of configuration options to support a variety of HVAC strategies and schedules.

## KEY FEATURES AND BENEFITS

- Flexible I/O options to support various types of HVAC equipment
- Occupancy-driven scheduling for maximum energy efficiency
- Humidity control by RH% or dewpoint, which can drastically improve efficiency of refrigeration system
- Alarms can be configured for all of the inputs to provide safe and efficient operation
- Support for 1-6 cooling stages, 1-6 heating stages, 1-3 pre-heat stages
- Analog outputs for modulated heating stage and outside, return, and bypass air dampers
- Setpoints for occupied and unoccupied modes with adjustable heat and cool deadbands, and summer/winter detection based on outside temperature

Supermarket Controls Solutions... **Simply Powerful**

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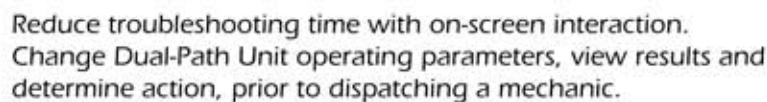
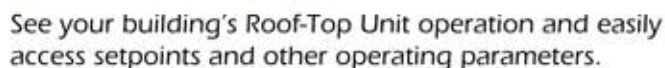
## SPECIFICATIONS

	MT-504	MT-508	MT-512
<b>Applications</b>	Small HVAC Applications: 0-5 Ton Roof-Top Units	Medium HVAC Applications: 5-40 Ton Roof-Top Units	Large HVAC Applications: 40-100 Ton Roof-Top Units
<b>Universal Inputs</b>	8 Universal Inputs (Analog or Digital): 0-5V, 0-10V, 4-20mA, 10K Thermistor Lowpass filter input conditioning	8 Universal Inputs (Analog or Digital): 0-5V, 0-10V, 4-20mA, 10K Thermistor Lowpass filter input conditioning	8 Universal Inputs (Analog or Digital): 0-5V, 0-10V, 4-20mA, 10K Thermistor Lowpass filter input conditioning
<b>Digital Inputs</b>	None	4 Digital Inputs: 0-15V, optically isolated	8 Digital Inputs: 0-15V, optically isolated
<b>Digital Outputs</b>	4 Type C Relay Outputs: SPDT, 2A, 250Vac. Protected by on board fuses	8 Type C Relay Outputs: SPDT, 2A, 250Vac. Protected by on board fuses	12 Type C Relay Outputs: SPDT, 2A, 250Vac. Protected by on board fuses
<b>Analog Outputs</b>	4 Analog Outputs configurable: 0-20mA, 0-5V, 0-10V, 2-10V. Protected by current limit (20mA max)	4 Analog Outputs configurable: 0-20mA, 0-5V, 0-10V, 2-10V. Protected by current limit (20mA max)	4 Analog Outputs configurable: 0-20mA, 0-5V, 0-10V, 2-10V. Protected by current limit (20mA max)
<b>Dimensions</b>	8.0" x 4.0" x 1.5" (204mm x 102mm x 38mm)	12.25" x 4.0" x 1.5" (312mm x 102mm x 38mm)	16.375" x 4.0" x 1.5" (416mm x 102mm x 38mm)
<b>Mounting</b>	SnapTrak Panel or Wall Mounting	SnapTrak Panel or Wall Mounting	SnapTrak Panel or Wall Mounting
<b>Electrical</b>	24Vac center tap transformer 12VA	24Vac center tap transformer 15VA	24Vac center tap transformer 20VA
<b>Environmental</b>	Operating and Storage: -40-168°F (-40-75°C) 5-95% RH, non-condensing	Operating and Storage: -40-168°F (-40-75°C) 5-95% RH, non-condensing	Operating and Storage: -40-168°F (-40-75°C) 5-95% RH, non-condensing
<b>Listings</b>	UL Listed, CSA Approved	UL Listed, CSA Approved	UL Listed, CSA Approved

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Specifications subject to change without notice  
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