

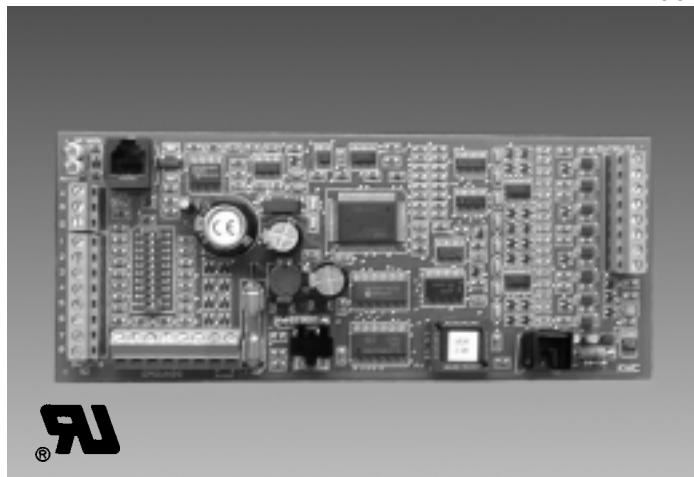
### DESCRIPTION

The KMD-5500 series is a line of full peer-to-peer, programmable direct digital controllers. Used in a stand-alone environment, networked to other KMD-5500 or KMD-6000 controllers, or as part of a complete facilities management system (multiple LAN), the KMD-5500 controllers provide precise monitoring and control of connected points. Through a combination of block and basic programming it is easy to implement proportional (P), proportional + integral (PI), or proportional + integral + derivative (PID) programs desired for control purposes.

These controllers may also be used to optimize the energy consumption or your facility by implementing various Energy Management strategies such as; demand limiting, duty cycling, outside air optimization, temperature setup/setback optimum start/stop routines, etc.

Other on-board features include:

- Stand-alone or networked peer-to-peer capabilities
- 2-Way modem communications, dial in - dial out
- 8 Universal Inputs - software selectable as analog or digital with standard and custom ranges
- 8 Universal Outputs - software selectable for analog or digital with standard and custom ranges
- 32 Virtual or Variable points - software selectable as analog or digital with standard and custom ranges; may have manually set or program driven values
- 8 Standard P, PI, or PID controllers
- 5 User definable programs
- 8 Trend Logs for data logging purposes, each supporting up to 4 analog, digital or virtual elements or points; when linked to the KMDigital operating system these logs may be graphically displayed
- 8 Runtime Logs with time:date stamp and cumulative runtime
- 4 System Groups for organizing selected points or elements into a real-time display or color graphic
- 4 Weekly Time schedules with overrides and optimum stop/start
- 2 Annual Routines for Holiday Schedules
- 3 Sensor conversion tables for creating linear curves
- 6 Access Levels with password protection
- On-board 60 character full English alarm messages
- On-board 60 character full English maintenance messages
- Power-fail with auto restart capabilities
- Programs and program parameters are stored in non-volatile memory



### SPECIFICATIONS

<b>Supply Voltage</b>	24 VAC -15%, +20%
Wiring	14-22 AWG
<b>Input Power</b>	20 VA
<b>Communications</b>	RS-485 @ 38,400 baud
Wiring	14-22 AWG twisted shielded, maximum 4,000 feet
<b>Inputs</b>	8 universal
Analog	0 to 5 VDC (4-20 mA w/resistor)
Digital	On/Off (pulse counting dry contact up to 4 Hz)
Impedance	10 K ohms
Overvoltage Protection	Yes
Wiring	12-22 AWG
<b>Outputs*</b>	8 universal
Analog	0 to 10 VDC
Digital	0/12 VDC
Short Protection	Yes
Wiring	12-22 AWG
<b>Ambient Limits</b>	
Operating	0°F to 120°F (-18°C to 49°C)
Shipping	-40°F to 140°F (-40°C to 60°C)
<b>Size</b>	7.78" x 3.25" x 1.438" (198 mm x 83 mm x 37 mm)
<b>Weight</b>	8 oz. (227 grams)
<b>Approval</b>	UL 916 Energy Management Equipment

\*Output current (analog or digital) is limited to 100 mA per any output, but not to exceed 350 mA total per controller.

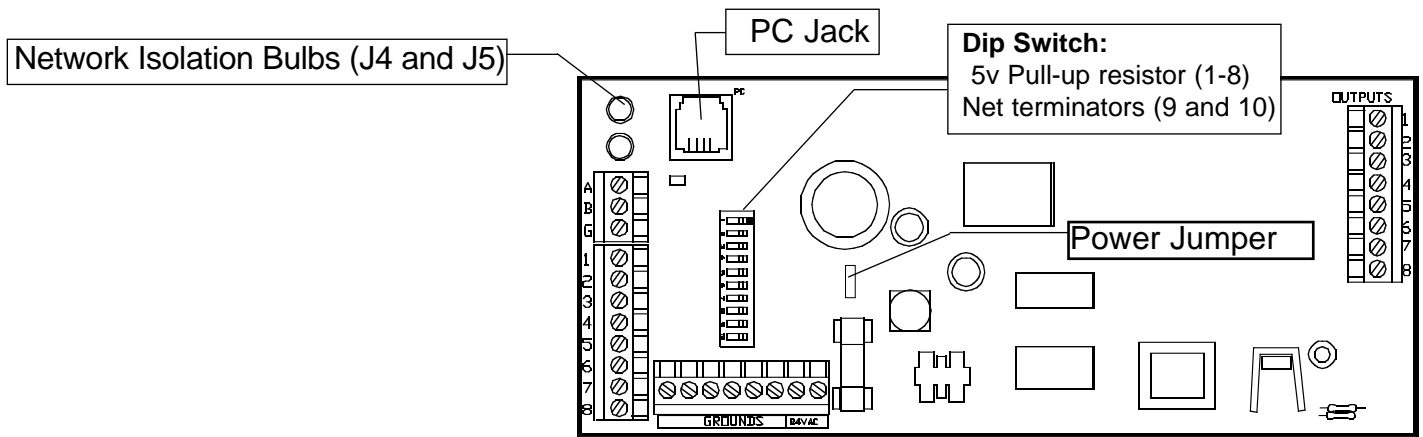
### ORDERING

**Specify:** Model Number

**Order From:** Local KMC Controls representative or, KMC Controls, Kreuter Manufacturing Co., Inc.

Specifications and design are subject to change without notice.

## INSTALLATION-CALIBRATION



The KMD-5500 series may be mounted in any position. Carefully remove the board from the snaptrack. Mount the track in the desired location. Carefully replace the board into the track without sliding or flexing the board. Flex only the track when removing or replacing the board.

As shipped, the pull-up resistors are included in the circuit and 5 volts are present at the input terminal to provide a source to measure passive devices such as thermistors. To improve accuracy when reading voltages sourced from transducers, flip the switch for that input off (to the left). The switch number matches the input number. See Chapter 9 in the KMD manual for more info on reading voltage / current inputs.

The 9th and 10th positions of the DIP switch allow the network terminators to be removed. As shipped, the terminators are installed. If there are two wires under the "A" and two wires under the "B" terminal, flip the switch at position 9 and 10 off (to the left). This will indicate the board is not at the physical end of the network. See the KMDigital Operator's Manual for more information on end of line termination (chapter 9).

Refer to the KMDigital Operator's Manual for complete installation and calibration information.

### MODELS

- KMD-5501 .....On board clock with auto-reset of time after power restoration
- KMD-5502 .....Same as KMD-5501 but without auto-reset
- KMD-5504 .....On board clock with auto-reset of time after power restoration with detachable terminal blocks
- KMD-5505 .....Same as KMD-5504 but without auto-reset

### MAINTENANCE

No routine maintenance is required. Each component's design and material selection assures dependable long-term reliability and performance. Careful installation will also enhance long-term reliability and performance.