

### Description

The KMD-5831 is a full peer-to-peer, programmable, direct digital controller used in stand-alone environments, networked to other KMC digital controllers, or as part of a complete facilities management system (multiple LAN), the KMD-5831 controller provides precise monitoring and control of connected points. Through a combination of block and basic programming implementation of proportional (P), proportional + integral (PI), or proportional + integral + derivative (PID) control sequences are easily accomplished.

This controller may also be used to optimize the energy consumption of 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.

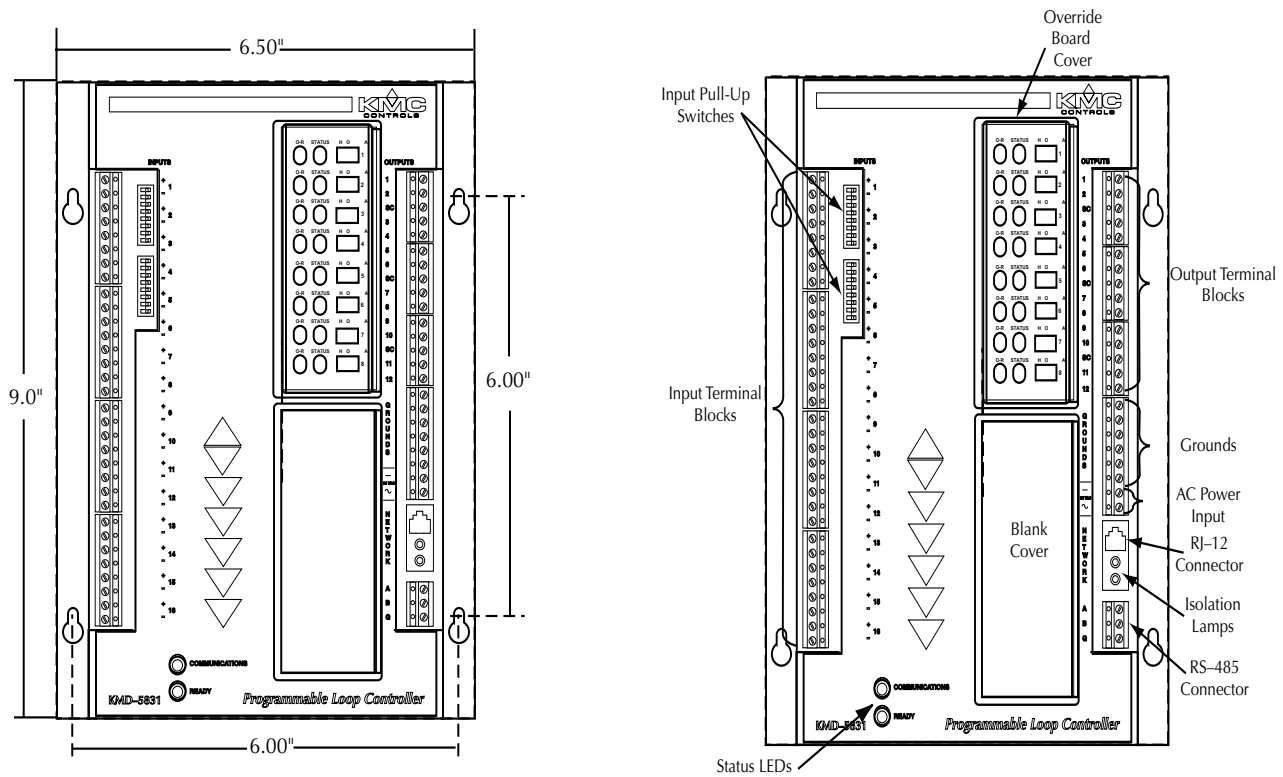
### Features

- ◆ Stand-alone or networked peer-to-peer capabilities
- ◆ 2-Way modem communications with KMD-5559
- ◆ 16 Universal Inputs - software selectable as analog or digital with standard and custom ranges
- ◆ 12 Universal Outputs - software selectable for analog or digital with standard and custom ranges. Optional output cards for "Hand-Off-Auto" w/ feedback with triac or relay output and DC analog output with override
- ◆ 128 Variable points - software selectable as analog or digital with standard and custom ranges; may have manually set or program driven values
- ◆ 124 Networked points in /63 networked points out
- ◆ NetSensor compatible
- ◆ Alarm buffering up to 30 alarms
- ◆ 16 Standard P, PI, or PID controllers with auto-tune capability
- ◆ 10 User definable programs
- ◆ 12 Runtime Logs with time/date stamp and cumulative runtime
- ◆ 12 Trend Logs for data logging purposes, each supporting up to 4 analog, digital or virtual elements or points; when linked to the KMC Digital operating system these logs may be graphically displayed
- ◆ 6 System Groups for organizing up to 32 selected points each into a real-time display or color graphic
- ◆ 8 Weekly Time schedules with overrides
- ◆ 4 Annual Routines for Holiday Schedules
- ◆ Automatic daylight savings time (requires WinControl v 2.03 or later)
- ◆ 6 Sensor conversion tables for creating linear curves
- ◆ 6 Access Levels with 27 individual password protection
- ◆ On-board 68 character full English alarm messages
- ◆ On-board 68 character full English maintenance messages
- ◆ Power-fail with auto restart capabilities
- ◆ Programs and program parameters are stored in nonvolatile flash memory.



(Shown with Optional Override Board Cover in place.)

## Details



## Options and Accessories

### Output override cards

HPO-6701	Triac output
HPO-6702	Short protected analog output
HPO-6703	Relay, normally open contacts
HPO-6704	4–20mA current loop
HPO-6705	Relay, normally closed contacts

### Covers

HPO-6802	Output board cover with labels. Must be used to secure the HPO-6700 Series Output Boards.
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## Specifications

<b>Supply Voltage</b>	24 VAC -15% / +20%, 20 VA
<b>Communications</b>	RS-485 @ 38,400 baud maximum with Belden 82760 or equivalent 18 AWG twisted shielded, 5.5Ω /1,000 ft. and ≤51 pf/ft (maximum 4,000 feet w/o repeater)
<b>Inputs</b>	16 universal w/10 bit A/D conversion
Analog	0 to 5 VDC, 4-20 mA
Digital	On/Off (pulse counting up to 16 Hz)

Impedance	10K Ω
Overvoltage Protection	Yes
Wiring	12-22 AWG Cu
<b>Outputs</b>	12 universal
Analog	0 to 10 VDC (see <i>Override Cards</i> )
Digital	0/12 VDC
Short Protection	Yes
Wiring	12-22 AWG Cu
<b>Case Material</b>	Black Metal
<b>Approvals</b>	UL 916 Energy Management Equipment, FCC & CE
<b>Weight</b>	16 oz. (0.5 kg)
<b>Temperature Limits</b>	
Operating	0° to 120°F (-18° to 49°C)
Shipping	-40° to 140°F (-40° to 60°C)
Humidity	0–95% RH, non-condensing

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