#### BUILDING AUTOMATION PRODUCTS

SUPERVISOR SOFTWARE AND TOOLS

## PEAK<sup>TM</sup> - SMART EQUIPMENT CONTROLLERS

#### **TECHNICAL SPECIFICATIONS**

# PEAK IOM SERIES (PART 1/2)

Codes	
РК-ІОМ1711-0	4-point IOM with 4 BI, SA Bus Support
PK-IOM2711-2	6-point IOM with 2 UI, 2 UO, 2 BO, SA Bus Support. Relays are rated for 240 VAC
PK-IOM2721-0	10-point IOM with 8 UI, 2 AO, SA Bus Support
PK-IOM3711-2	12-point IOM with 4 UI, 4 UO, 4 BO, SA Bus Support. Relays are rated for 240 VAC
PK-IOM3721-0	16-point IOM with 16 BI, SA Bus Support
PK-IOM3731-0	16-point IOM with 8 BI, 8 BO, SA Bus Support
PK-IOM4711-0	17-point IOM with 6 UI, 2 BI, 3 BO, 2 AO, 4 CO, SA Bus Support
PK-IOM5711-0	16-Point IOM with 16 UI, SA Bus Support
PK-IOM5731-0	16-Point IOM with 8 AO, 8 BO with HOA switches and LED indicators, SA Bus Support
Supply Voltage	24 VAC (nominal, 20 VAC minimum/30 VAC maximum), 50/60 Hz, Safety Extra-Low Voltage (SELV)
Power Consumption	14 VA maximum
	<b>Note:</b> VA ratings do not include any power supplied to the peripheral devices connected to Binary Outputs (BOs) or Configurable Outputs (COs), which can consume up to 12 VA for each BO or CO, for a possible total consumption of an additional 84 VA (maximum), depending on the IOM model.
Ambient Conditions	
	0 to 50°C; 10 to 90% RH noncondensing
Storage	-40 to 80°C; 5 to 95% RH noncondensing
Addressing	DIP switch set; valid field controller device addresses 4–127 (Device addresses 0–3 and 128–255 are reserved and not valid IOM addresses).
Communications Bus	BACnet MS/TP, RS-485 4-wire SA Bus between field controller, network sensors, and other sensor/actuator devices. Includes a lead source 15 VDC supply power (from field controller) to bus devices.
Processor	H8SX/166xR Renesas® 32-bit microcontroller
Memory	512 KB Flash Memory and 128 KB RAM
Input and Output Capabilities	
PK-IOM1711	4 - Binary Inputs: Defined as Dry Contact Maintained or Pulse Counter/ Accumulator Mode
	<ul> <li>2 - Universal Inputs: Defined as 0 to 10 VDC, 4 to 20 mA, 0 to 600k ohm, or Binary Dry Contact</li> <li>2 - Universal Outputs: Analog output: Voltage mode, 0-10 VDC; Binary iutput mode: 24 VAC/DC FET; Analog output: Current mode, 4 to 20 mA</li> <li>2 - Relay Outputs: (Single-pole, Double-throw); EN 60730 (-2 model only) 6 (4) A N.O. or N.C. only, 240 VAC</li> </ul>
PK-IOM2721	8 - Universal Inputs: Defined as 0 to 10 VDC, 4 to 20 mA, 0 to 600k ohm, or Binary Dry Contact 2 - Analog Outputs: Defined as 0 to 10 VDC or 4 to 20 mA
PK-IOM3711	<ul> <li>4 - Universal Inputs: Defined as 0 to 10 VDC, 4 to 20 mA, 0 to 600k ohm, or Binary Dry Contact</li> <li>4 - Universal Outputs: Analog Output: Voltage Mode, 0-10 VDC; Binary Output Mode: 24 VAC/DC FET; Analog Output: Current Mode, 4 to 20 mA</li> <li>4 - Relay Outputs: (Single-Pole, Double-Throw); EN 60730 (-2 model only): 6 (4) A N.O. or N.C. only, 240 VAC</li> </ul>
PK-IOM3721	16 - Binary Inputs: Defined as Dry Contact Maintained or Pulse Counter/Accumulator Mode
PK-IOM3731	<ul> <li>8 - Binary Inputs: Defined as Dry Contact Maintained or Pulse Counter/Accumulator Mode</li> <li>8 - Binary Outputs: Defined as 24 VAC Triac (Require external low-voltage power source)</li> <li>Note: Binary Outputs (BOs) on MS-IOM3731-OA controllers do not supply power for the outputs; the BOs require external low-voltage (&lt;30 VAC) power sources.</li> </ul>

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#### **TECHNICAL SPECIFICATION**

#### PEAK IOM SERIES (PART 2/2)

Input and Output Capabilities	
PK-IOM4711	<ul> <li>6 - Universal Inputs: Defined as 0-10 VDC, 4-20 mA, 0-600k ohm, or Binary Dry Contact</li> <li>2 - Binary Inputs: Defined as Dry Contact Maintained or Pulse/Counter Accumulator Mode</li> <li>3 - Binary Outputs: Defined as 24 VAC Triac (selectable internal or external source power)</li> <li>4 - Configurable Outputs: Defined as 0-10 VDC or 24 VAC Triac BO</li> <li>2 - Analog Outputs: Defined as 0-10 VDC or 4-20 mA</li> </ul>
PK-IOM5711	16 - Universal Inputs: Defined as 0-10 VDC, 4-20 mA, 0-600k ohm, or Binary Dry Contact
PK-IOM5731	8 - Analog Outputs: Defined as 0–10 VDC or 4–20 mA 8 - Relay Ouputs: Defined as 120 VAC–240 VAC SPDT Form C
Analog Input/Analog Output Resolution and Accuracy	
Analog Input	16-bit resolution
Analog Output	16-bit resolution and ±200 mV in 0-10 VDC applications
Terminations	
Input/Output	Fixed screw terminal blocks
SA Bus and Supply Power	4-wire pluggable screw terminal blocks SA Bus Port: RJ-12 6-Pin modular jacks
Mounting	Horizontal on single 35 mm DIN rail mount (preferred), or screw mount on flat surface with three integral mounting clips on controller
Housing	
Enclosure Material	ABS and polycarbonate UL94 5VB; self-extinguishing, Plenum-rated protection class IP20 (IEC529)
Dimensions (Height x Width x Depth)	
PK-IOM17 and PK-IOM27 Family Models	150 x 120 x 53 mm including terminals and mounting clips
PK-IOM2721, PK-IOM3721, and PK-IOM3731 Models	150 x 164 x 53 mm including terminals and mounting clips
PK-IOM37 and PK-IOM47 Family Models	150 x 190 x 53 mm including terminals and mounting clips
	<b>Note:</b> Mounting space for all field controllers requires an additional 50 mm space on top, bottom, and front face of controller for easy cover removal, ventilation, and wire terminations.
Weight	0.5 kg maximum
CE Compliance	Johnson Controls declares that these products are in compliance with the essential requirements and other relevant provisions of the EMC Directive and Low Voltage Directive.

