



Description

You can switch the programmable and configurable PEAK 18 and PEAK 32 Controllers between MS/TP, Modbus RTU, and N2 Communication protocols in real-time through the onboard local display or through the Mobile Access Portal (MAP) Gateway. When you use the controllers as MS/TP devices, they are BACnet® Advanced Application Controllers (B-AACs) with integral RS-485 BACnet MS/TP communications.

PEAK Series Controllers feature an integral real-time clock and support time-based tasks, which enables the field controllers to monitor and control schedules, calendars, alarms, and trends.

The PEAK 18 controller features line-voltage relay outputs, making this controller well-suited for use in terminal units. The PEAK 18 model uses a line-voltage power supply, which eliminates the need for a 24 VAC transformer in line-voltage applications. PEAK 18 comes both in 24 VAC and 120 VAC to 240 VAC power models, with or without display.

The PEAK 32 with larger inputs and outputs counts also features line-voltage relay outputs for many suitable applications. PEAK 32 comes in a 24 VAC model, with or without display.

You can apply a full range of PEAK 18 and 32 models, combined with the Input/Output Module (IOM) models, to a wide variety of OEM applications that range from simple fan coil or heat pump control to advanced AHU or chiller applications.

Repair information

If the OEM PEAK family of controllers, network sensor, or any related product fails to operate within its specifications, replace the product. For replacement products, contact the nearest OEM Johnson Controls representative.

Selection chart

Table 1: PEAK OEM Series ordering information

Product code number	Description
PK-OEM1810-0	PEAK OEM 18 24 Volts no Display- 5 UI, 4 BI, 2 BO, 4 RO, and 3 CO
PK-OEM1820-0	PEAK OEM 18 24 Volts with Display- 5 UI, 4 BI, 2 BO, 4 RO, and 3 CO
PK-OEM1811-0	PEAK OEM 18 240 Volts no Display- 5 UI, 4 BI, 2 BO, 4 RO, and 3 CO
PK-OEM1821-0	PEAK OEM 18 240 Volts with Display- 5 UI, 4 BI, 2 BO, 4 RO, and 3 CO
PK-OEM3210-0	PEAK OEM 32 24 Volts no Display- 6 UI, 12 BI, 4 BO, 5 RO, 4 CO, and 1 PWM
PK-OEM3220-0	PEAK OEM 32 24 Volts with Display- 6 UI, 12 BI, 4 BO, 5 RO, 4 CO, and 1 PWM

Table 2: PEAK IOM Series ordering information

Product code number	Description	UL and cUL (Canada)	CE Marked
PK-IOM1711-0	4-point IOM with 4 BI, FC bus, and SA bus support	X	X
PK-IOM2711-0	6-point IOM with 2 UI, 2 UO, 2 BO, field controller (FC) bus, and sensor/actuator (SA) bus support. Relays are rated for 120/240 VAC.	X	
PK-IOM2711-2	6-point IOM with 2 UI, 2 UO, 2 BO, FC bus, and SA bus support. Relays are rated for 240 VAC.		X
PK-IOM2721-0	10-point IOM with 8 UI, 2 AO, FC bus, and SA bus support	X	X
PK-IOM3711-0	12-point IOM with 4 UI, 4 UO, 4 BO, FC bus, and SA bus support. Relays are rated for 120/240 VAC.	X	
PK-IOM3711-2	12-point IOM with 4 UI, 4 UO, 4 BO, FC bus, and SA bus support. Relays are rated for 240 VAC.		X
PK-IOM3721-0	16-point IOM with 16 BI, FC bus, and SA bus support	X	X
PK-IOM3731-0	16-point IOM with 8 BI, 8 BO, FC bus, and SA bus support	X	X

Table 2: PEAK IOM Series ordering information

Product code number	Description	UL and cUL (Canada)	CE Marked
PK-IOM4711-0	17-point IOM with 6 UI, 2 BI, 3 BO, 2 AO, 4 CO, FC, and SA bus support	X	X
PK-IOM5711-0	16-point IOM with 16 UI. Relays are rated for 120/240 VAC.	X	X
PK-IOM5731-0	16-point IOM with 8 AO and 8 RO. Relays are rated for 240 VAC.	X	X

Table 3: PEAK Controller Family accessories (order separately)

Product code number	Description
MS-BACEOL-0	Terminator module providing end-of-line (EOL) termination on FC bus and N2 segments
MS-BTCVT-1	Wireless Commissioning Converter with Bluetooth Technology
MS-BTCVTCBL-700	Cable Replacement Set for the MS-BTCVT-1 or the NS-ATV7003-0; Includes one 5 ft (1.5 m) retractable cable
NS Series Sensors	NS Series Network Sensors: Refer to the <i>NS Series Network Sensors Product Bulletin (LIT-12011574)</i> for specific sensor model descriptions.
Y64T15-0	Transformer, 120/208/240 VAC Primary to 24 VAC Secondary, 92 VA, Foot Mount, 30 in. Primary Leads and 30 in. Secondary Leads, Class 2
Y65A13-0	Transformer, 120 VAC Primary to 24 VAC Secondary, 40 VA, Foot Mount (Y65AS), 8 in. Primary Leads and 30 in. Secondary Leads, Class 2
Y65T42-0	Transformer, 120/208/240 VAC Primary to 24 VAC Secondary, 40 VA, Hub Mount (Y65SP+), 8 in. Primary Leads and Secondary Screw Terminals, Class 2
Y65T31-0	Transformer, 120/208/240 VAC Primary to 24 VAC Secondary, 40 VA, Foot Mount (Y65AR+), 8 in. Primary Leads and Secondary Screw Terminals, Class 2
TL-MAP1810-0Px	Portable MAP Gateway includes MAP Gateway, RJ-12 cable, protective shell, and lanyard.
TL-MAP1810-0Sx	Stationary MAP Gateway includes MAP Gateway, field bus adapter, mounting bracket, and AC power supply. (Adapters for the power supply may vary per country.)
NS-WALLPLATE-0	Network Sensor wall plate
TL-BRTRP-0	Portable BACnet IP to MS/TP router

Technical specifications

Table 4: PEAK OEM 18 24 Volt Controllers (PK-OEM18x0-0)

Specification	Description
Product code numbers	PK-OEM1810-0 PEAK OEM 18 Controller 24 Volt without Display PK-OEM1820-0 PEAK OEM 18 Controller 24 Volt with Display
Supply voltage	24 VAC, 20 VAC minimum/30 VAC maximum, 50/60 Hz, power supply Class 2(North America), Safety Extra-Low Voltage (SELV) (Europe)
Power consumption	20 VA maximum VA rating does 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 60 VA (maximum).
Ambient conditions	Operating: -20°C to 70°C (-4°F to 158°F); 10% to 95% RH noncondensing; pollution degree 2 Storage: -40°C to 85°C (-40°F to 185°F); 5% to 95% RH noncondensing

Table 4: PEAK OEM 18 24 Volt Controllers (PK-OEM18x0-0)

Specification	Description
Addressing	BACnet MS/TP: Valid field controller device addresses 4–127. Device addresses 0–3 and 128–255 are reserved and not valid field controller addresses. N2: Valid field controller device addresses 1 to 255
Communications bus	BACnet MS/TP, Modbus, and N2 through RS-485: 3-wire FC bus between the supervisory controller and field controller 3-wire SA bus between controller, network sensors, and other SA devices, includes a lead to source 15 VDC supply power from controller to bus devices. 3-wire one Modbus communication half-duplex (Master RTU port)
Processor	RX631 Renesas® 32-bit microcontroller
Memory	16 MB flash memory and 8 MB RAM
Input and output capabilities	Five universal inputs: User-configurable, 3 available modes: Voltage Input: 0 VDC–10 VDC Current Sense Input: 4 mA–20 mA Resistive Inputs/Dry Contact Inputs Four BIs: Defined as Dry Contact maintained or Pulse Counter/Accumulator mode Three configurable outputs: User-configurable, 2 available modes: AO: 0 VDC–10 VDC, 10 mA Triac Output: 24 VAC, 0.5 A (Externally sourced powered) One utility output power port (24~ OUT): Ability to deliver 24 VAC Four BOs (relays): Single-Pole, Single-Throw (SPST). Dry Contacts rated 240 VAC. UL: 240 VAC 5 A Resistive, 1.9 LA/11.1LRA, D300 Pilot Duty, 70°C/158°F (30,000 cycles) IEC: 240 VAC 3 A Resistive, 3A Inductive, Cos=0.6, -20°C to 70°C (-4°F to 158°F) (100,000 cycles) Reference all relay commons to the same pole of the supply circuit. Two BOs (triacs): Output: 24 VAC or 240 VAC, 0.5 A (externally powered). Reference all triac commons to the same pole of the supply circuit.
AI/AO resolution and accuracy	AI: 12-bit resolution AO: 15-bit resolution, +/- 200 mV accuracy in 0 VDC–10 VDC applications
Terminations	Input/Output: Fixed spade terminals SA, FC, and Modbus: 4-wire and 3-wire pluggable screw terminal blocks SA bus tool port: RJ-12 6-pin modular jack Field install option: Input/Output: Fixed solder terminals SA, FC, and Modbus: 4-wire and 3-wire pluggable screw terminal blocks SA bus tool port: RJ-12 6-pin modular jack
Mounting	Horizontal on single 35 mm DIN rail mount (preferred), or screw mount on flat surface with three integral mounting clips on controller. Mount the PEAK controllers on a wall or DIN rail inside an enclosure that is rated at least IP20.
Housing	Enclosure material: Polycarbonate Lexan SABIC EXL9330
Dimensions (H x W x D)	164 mm x 125 mm x 53 mm (6.45 in. x 4.92 in. x 2.08 in.) excluding terminals and mounting clips
Weight	0.5 kg (1.1 lb)

Table 4: PEAK OEM 18 24 Volt Controllers (PK-OEM18x0-0)


Specification	Description
Compliance	<p>United States: UL Listed, File E107041, CCN PAZX, UL 916, Energy Management Equipment FCC Compliant to CRF47, Part 15, Subpart B, Class A</p> <p>Canada: UL Listed, File E107041, CCN PAZX7 CAN/CSA C22.2 No.205, Signal Equipment Industry Canada Compliant, ICES-003</p> <p>BACnet International: BACnet Testing Laboratories (BTL) Protocol Revision 12 Listed BACnet Advanced Application Controller (B-AAC)</p> <p>Australia and New Zealand: RCM Mark, Australia/NZ Emissions Compliant</p>
	<p>Europe: Johnson Controls declares that this product is also in compliance with the essential requirements and other relevant provisions of the EMC Directive Declared as Electronic Independently mounted control, suitable for DIN rail mounting. Intended to mount in remote panel. Type 1.C (Micro-interruption), 330 V rated impulse voltage. 125°C ball pressure test.</p>

Table 5: PEAK OEM 18 240 Volt SMART Equipment Controller (PK-OEM18x1-0)

Specification	Description
Product code numbers	PK-OEM1811-0 PEAK OEM 18 Controller 120/240 VAC no Display PK-OEM1821-0 PEAK OEM 18 Controller 120/240 VAC with Display
Supply voltage	120/240 VAC, 50/60 Hz, power supply Class 1 (North America), Safety Extra-Low Voltage (SELV) (Europe)
Power consumption	20 VA maximum for PK-OEM1821-0 VA rating does not include any power supplied to the peripheral devices connected to BOs or COs, which can consume up to 12 VA for each BO or CO; for a possible total consumption of an additional 60 VA (maximum).
Ambient conditions	<p>Operating: -20°C to 70°C (-4°F to 158°F); 10% to 95% RH noncondensing; Pollution degree 2</p> <p>Storage: -40°C to 85°C (-40°F to 185°F); 5% to 95% RH noncondensing</p>
Addressing	<p>BACnet MS/TP: Valid field controller device addresses 4-127. Device addresses 0-3 and 128-255 are reserved and are not valid field controller addresses.</p> <p>N2: Valid field controller device addresses 1 to 255</p>
Communications bus	<p>BACnet MS/TP, Modbus, and N2 through RS-485:</p> <p>3-wire FC bus between the supervisory controller and field controller</p> <p>3-wire SA bus between controller, network sensors, and other SA devices, includes a lead to source 15 VDC supply power (from controller) to bus devices.</p> <p>3-wire one Modbus communication half-duplex (Master RTU port)</p>
Processor	RX631 Renesas 32-bit microcontroller
Memory	16 MB flash memory and 8 MB RAM

Table 5: PEAK OEM 18 240 Volt SMART Equipment Controller (PK-OEM18x1-0)


Specification	Description
Input and output capabilities	<p>Five universal inputs: User-configurable, 3 available modes: Voltage Input: 0 VDC-10 VDC Current Sense Input: 4 mA-20 mA Resistive Inputs/Dry Contact Inputs</p> <p>Four BIs: Defined as Dry Contact maintained or Pulse Counter/Accumulator mode</p> <p>Three configurable outputs: User-configurable, 2 available modes: AO: 0 VDC-10 VDC, 10 mA Triac output: 24 VAC, 0.5 A (Externally sourced powered)</p> <p>One utility output power port: Ability to deliver 24 VAC</p> <p>Four BOs (relays): SPST. Dry Contacts rated 240 VAC. UL: 240 VAC, 5 A Resistive, 1.9 LA/11.1LRA, D300 Pilot Duty, 70°C/158°F(30,000 cycles) IEC: 240 VAC, 3 A Resistive, 3 A Inductive, Cos=0.6, -20°C to 70°C (-4°F to 158°F) (100,000 cycles) Reference all relay commons to the same pole of the supply circuit.</p> <p>Two BOs (triacs): Output: 24 VAC or 240 VAC, 0.5 A (Externally Powered). Reference all triac commons to the same pole of the supply circuit.</p>
AI/AO resolution and accuracy	AI: 12-bit resolution; AO: 15-bit resolution, +/- 200 mV accuracy in 0 VDC-10 VDC applications
Terminations	<p>Input/Output: Fixed spade terminals SA, FC, and Modbus: 4-wire and 3-wire pluggable screw terminal blocks SA bus tool port: RJ-12 6-pin modular jack</p> <p>Field install option: Input/Output: Fixed solder terminals SA, FC, and Modbus: 4-wire and 3-wire pluggable screw terminal blocks SA bus tool port: RJ-12 6-pin modular jack</p>
Mounting	Horizontal on single 35 mm DIN rail mount (preferred), or screw mount on flat surface with three integral mounting clips on controller. Mount the PEAK controllers on a wall or DIN rail inside an enclosure that is rated at least IP20.
Method to provide earthing (grounding)	Functional earthing: Terminal W44
Housing	Enclosure material: Polycarbonate Lexan SABIC EXL9330)
Dimensions (H x W x D)	190 mm x 125 mm x 58 mm (7.48 in. x 4.92 in. x 2.28 in.) excluding terminals and mounting clips
Weight	0.5 kg (1.1 lb)
Compliance	<p>United States: UL Listed, File E107041, CCN PAZX, UL 916, Energy Management FCC Compliant to CRF47, Part 15, Subpart B, Class A</p> <p>Canada: UL Listed, File E107041, CCN PAZX7 CAN/CSA C22.2 No.205, Signal Equipment Industry Canada Compliant, ICES-003</p> <p>BACnet International: BACnet Testing Laboratories (BTL) Protocol Revision 12 Listed BACnet Advanced Application Specific Controller (B-AAC)</p> <p>Australia and New Zealand: RCM Mark, Australia/NZ Emissions Compliant</p>
	<p>Europe: Johnson Controls declares that this product is also in compliance with the essential requirements and other relevant provisions of the EMC Directive and Low Voltage Directive Declared as Electronic Independently mounted control, suitable for DIN rail mounting. Intended to mount in remote panel. Type 1.C (Micro-interruption) for relays, 2,500 V rated impulse voltage. 125°C ball pressure test.</p>

Table 6: PEAK OEM 32 24 Volt Controllers (PK-OEM32x0-0)

Specification	Description
Product code numbers	PK-OEM3210-0 PEAK OEM 32 Controller 24 Volts without Display PK-OEM3220-0 PEAK OEM 32 Controller 24 Volts with Display
Supply voltage	24 VAC, 20 VAC minimum/30 VAC maximum), 50/60 Hz, power supply Class 2(North America), Safety Extra-Low Voltage (SELV) (Europe)
Power consumption	20 VA maximum VA rating does not include any power supplied to the peripheral devices connected to BOs or COs, which can consume up to 12 VA for each BO or CO; for a possible total consumption of an additional 60 VA (maximum).
Ambient conditions	Operating: -20°C to 70°C (-4°F to 158°F); 10% to 95% RH noncondensing; pollution degree 2 Storage: -40°C to 85°C (-40°F to 185°F); 5% to 95% RH noncondensing
Addressing	BACnet MS/TP: Valid field controller device addresses 4–127 (Device addresses 0–3 and 128–255 are reserved and not valid field controller addresses.) N2: Valid field controller device addresses 1 to 255
Communications bus	BACnet MS/TP, Modbus, and N2 via RS-485: 3-wire FC bus between the supervisory controller and field controller addresses). 3-wire SA bus between controller, network sensors and other SA devices, includes a lead to source 15 VDC supply power (from controller) to bus devices. 3-wire one Modbus communication half-duplex (Master RTU port)
Processor	RX631 Renesas 32-bit microcontroller
Memory	16 MB flash memory and 8 MB RAM
Input and output capabilities	Six universal inputs: User-configurable, 3 available modes: Voltage Input: 0 VDC–10 VDC Current Sense Input: 4 mA–20 mA Resistive Inputs/Dry Contact Inputs 12 BIs: Defined as Dry Contact maintained or Pulse Counter/Accumulator mode Four configurable outputs: User-configurable, 2 available modes: AO: 0 VDC–10 VDC, 10 mA Triac output: 24 VAC, 0.5 A (externally sourced powered) One utility output power port (24~ OUT): Ability to deliver 24 VAC Four BOs (relays): SPST, Dry Contacts rated 240 VAC. UL: 240 VAC 5A Resistive, 1.9 LA/11.1LRA, D300 Pilot Duty, 70°C/158°F (30,000 cycles) IEC: 240 VAC 3A Resistive, 3A Inductive, Cos=0.6, -20°C to 70°C (-4°F to 158°F) (100,000 cycles) One BOs (relays): Single-Pole, Double-Throw, Dry Contacts rated 240 VAC UL: 240 VAC 5A Resistive, 1.9 LA/11.1LRA, D300 Pilot Duty, 70°C/158°F (30,000 cycles) IEC: 240 VAC 3A Resistive, 3A Inductive, Cos=0.6, -20°C to 70°C (-4°F to 158°F) (100,000 cycles) One PWM output port: 5V, 12V, 15V selectable PWM output voltage, 10 mA (maximum) continuous current, 100 Hz Reference all relay commons to the same pole of the supply circuit. Four BOs (triacs): Output: 24 VAC or 240 VAC, 0.5 A (externally powered). Reference all triac commons to the same pole of the supply circuit.
AI/AO resolution and accuracy	AI: 12-bit resolution AO: 15-bit resolution, +/- 200 mV accuracy in 0 VDC–10 VDC applications
Terminations	Input/Output: Fixed spade terminals SA, FC, and Modbus: 4-wire and 3-wire pluggable screw terminal blocks SA bus tool port: RJ-12 6-pin modular jack Field install option: Input/Output: Fixed solder terminals SA, FC, and Modbus: 4-wire and 3-wire pluggable screw terminal blocks SA bus tool port: RJ-12 6-pin modular jack

Table 6: PEAK OEM 32 24 Volt Controllers (PK-OEM32x0-0)


Specification	Description
Mounting	Horizontal on single 35 mm DIN rail mount (preferred), or screw mount on flat surface with three integral mounting clips on controller. Mount the PEAK controllers on a wall or DIN rail inside an enclosure that is rated at least IP20.
Housing	Enclosure material: Polycarbonate Lexan SABIC EXL9330)
Dimensions (H x W x D)	220 mm x 125 mm x 58 mm (8.66 in. x 4.92 in. x 2.28 in.)
Weight	0.5 kg (1.1 lb)
Compliance	United States: UL Listed, File E107041, CCN PAZX, UL 916, Energy Management Equipment FCC Compliant to CRF47, Part 15, Subpart B, Class A Canada: UL Listed, File E107041, CCN PAZX7 CAN/CSA C22.2 No.205, Signal Equipment Industry Canada Compliant, ICES-003 BACnet International: BACnet Testing Laboratories (BTL) Protocol Revision 12 Listed BACnet Advanced Application Controller (B-AAC) Australia and New Zealand: RCM Mark, Australia/NZ Emissions Compliant  Europe: Johnson Controls declares that this product is also in compliance with the essential requirements and other relevant provisions of the EMC Directive and Declared as Electronic Independently mounted control, suitable for DIN rail mounting. Intended to mount in remote panel. Type 1.C (Micro-interruption), 330 V rated impulse voltage. 125°C ball pressure test.

Table 7: PEAK IOM Series


Specification	Description
Product code numbers	PK-IOM1711-0: 4-point IOM with 4 BI, FC bus, and SA bus support PK-IOM2711-0: 6-point IOM with 2 UI, 2 UO, 2 BO, FC bus, and SA bus support. Relays are rated for 120/240 VAC PK-IOM2711-2: 6-point IOM with 2 UI, 2 UO, 2 BO, FC bus, and SA bus support. Relays are rated for 240 VAC. PK-IOM2721-0: 10-point IOM with 8 UI, 2 AO, FC bus, and SA bus support PK-IOM3711-0: 12-point IOM with 4 UI, 4 UO, 4 BO, FC bus, and SA bus support. Relays are rated for 120/240 VAC PK-IOM3711-2: 12-point IOM with 4 UI, 4 UO, 4 BO, FC bus, and SA bus support. Relays are rated for 240 VAC PK-IOM3721-0: 16-point IOM with 16 BI, FC bus, and SA bus support PK-IOM3731-0: 16-point IOM with 8 BI, 8 BO, FC bus, and SA bus support PK-IOM4711-0: 17-point IOM with 6 UI, 2 BI, 3 BO, 2 AO, 4 CO, FC, and SA bus support
Supply voltage	24 VAC (nominal, 20 VAC minimum/30 VAC maximum), 50/60 Hz, Power Supply Class 2(North America), Safety Extra-Low Voltage (SELV) Europe
Power consumption	14 VA maximum  Note: VA ratings do not include any power supplied to the peripheral devices connected to BOs or 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	Operating: -40°C to 60°C (32°F to 122°F); 10% to 90% RH noncondensing Storage: -40°C to 80°C (-40°F to 176°F); 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 wire FC bus between the supervisory controller and field devices 4-wire SA bus between field controller, network sensors, and other SA devices. Includes a lead source 15 VDC supply power (from field controller) to bus devices.

Table 7: PEAK IOM Series

Specification	Description
Processor	H8SX/166xR Renesas 32-bit microcontroller
Memory	512 KB flash memory and 128 KB RAM
Input and output capabilities	<p>PK-IOM1711: 4 - BIs: Defined as Dry Contact Maintained or Pulse Counter/Accumulator mode</p> <p>PK-IOM2711: 2 - Universal inputs: Defined as 0 VDC-VDC, 4 mA-20 mA, 0k-600k ohm, or Binary Dry Contact 2 - Universal outputs: AO: Voltage mode, 0-10 VDC; BO mode: 24 VAC/DC FET; AO: Current mode, 4 mA-20 mA 2 - Relay outputs: (SPDT); UL 916 (-0 model only): 1/4 hp 120 VAC, 1/2 hp 240 VAC; 360 VA Pilot Duty at 120/240 VAC (B300); 3 A Non-inductive 24 VAC-240 VAC; EN 60730 (-2 model only): 6 (4) A N.O. or N.C. only, 240 VAC</p> <p>PK-IOM2721: 8 - Universal inputs: Defined as 0 VDC-10 VDC, 4 mA-20 mA, 0k-600k ohm, or Binary Dry Contact 2 - AOs: Defined as 0 VDC-10 VDC or 4 mA-20 mA</p> <p>PK-IOM3711: 4 - Universal inputs: Defined as 0 VDC-10 VDC, 4 mA-20 mA, 0k-600k ohm, or Binary Dry Contact 4 - Universal outputs: AO: Voltage mode, 0 VDC-10 VDC; BO mode: 24 VAC/DC FET; AO: Current mode, 4 mA-20 mA 4 - Relay outputs: (SPDT); UL 916 (-0 model only): 1/4 hp 120 VAC, 1/2 hp 240 VAC; 360 VA Pilot Duty at 120/240 VAC (B300); 3 A Non-inductive 24-240 VAC; EN 60730 (-2 model only): 6 (4) A N.O. or N.C. only, 240 VAC</p>
Input and output capabilities	<p>PK-IOM3721: 16 - BIs: Defined as Dry Contact Maintained or Pulse Counter/Accumulator mode</p> <p>PK-IOM3731: 8 - BIs: Defined as Dry Contact Maintained or Pulse Counter/Accumulator mode 8 - BOs: Defined as 24 VAC triac (Require external low-voltage power source.)</p> <p>Note: BOs on MS-IOM3731-0A controllers do not supply power for the outputs; the BOs require external low-voltage (< 30 VAC) power sources.</p> <p>PK-IOM4711: 6 - Universal inputs: Defined as 0 VDC-10 VDC, 4 mA-20 mA, 0k-600k ohm, or Binary Dry Contact 2 - BIs: Defined as Dry Contact Maintained or Pulse/Counter Accumulator mode 3 - BOs: Defined as 24 VAC Triac (selectable internal or external source power) 4 - Configurable outputs: Defined as 0 VDC-10 VDC or 24 VAC Triac BO 2 - AOs: Defined as 0 VDC-10 VDC or 4 mA-20 mA</p>
AI/AO resolution and accuracy	AI: 16-bit resolution AO: 16-bit resolution and ± 200 mV in 0-10 VDC applications
Terminations	Input/Output: Fixed screw terminal blocks SA/FC bus and supply power: 4-wire and 3-wire pluggable screw terminal blocks SA/FC 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 V5B; self-extinguishing, Plenum-rated protection class: IP20 (IEC529)
Dimensions (Height x Width x Depth)	<p>PK-IOM17 and PK-IOM27 Family models: 150 mm x 120 mm x 53 mm (5-7/8 in. x 4-3/4 in. x 2-1/8 in.) including terminals and mounting clips</p> <p>PK-IOM2721, PK-IOM3721, and PK-IOM3731 models: 150 mm x 164 mm x 53 mm (5-7/8 in. x 6-7/16 in. x 2-1/8 in.) including terminals and mounting clips</p> <p>PK-IOM37 and PK-IOM47 Family models: 150 mm x 190 mm x 53 mm (5-7/8 in. x 7-1/2 in. x 2-1/8 in.) including terminals and mounting clips</p> <p>Note: Mounting space for all field controllers requires an additional 50 mm (2 in.) space on top, bottom, and front face of controller for easy cover removal, ventilation, and wire terminations.</p>
Weight	0.5 kg (1.1 lb) maximum

Table 7: PEAK IOM Series




Specification	Description
Compliance	<p>United States: UL Listed, File E107041, CCN PAZX, UL 916, Energy Management Equipment; FCC Compliant to CFR47, Part 15, Subpart B, Class A Except IOM2711-2 and IOM3711-2</p> <p>Canada: UL Listed, File E107041, CCN PAZX7, CAN/CSA C22.2 No. 205, Signal Equipment; Industry Canada Compliant, ICES-003 Except IOM2711-2 and IOM3711-2</p> <p>BACnet International: BACnet Testing Laboratories (BTL) Protocol Revision 4 Listed BACnet Application Specific Controller (B-ASC)</p> <p>Australia and New Zealand: RCM Mark, Australia/NZ Emissions Compliant Except IOM2711-2 and IOM3711-2</p>
	<p>BACnet International: BACnet Testing Laboratories (BTL) Protocol Revision 4 Listed BACnet Application Specific Controller (B-ASC) Europe: CE Mark - Johnson Controls declares that this product is in compliance with the essential requirements and other relevant provisions of the EMC Directive 2004/108/EC. Declared as Independently Mounted, Intended for Panel Mounting, Operating Control Type 1.B, 4kV rated impulse voltage, 100.7°C ball pressure test.</p> <p>Note: Except IOM2711-0 and IOM3711-0</p>

Table 8: PEAK IOM57 Series technical specifications

Specification	Description
Product code numbers	PK-IOM5711 Series Input/Output Module PK-IOM5731 Series Input/Output Module
Supply voltage	24 VAC (nominal, 20 VAC minimum/30 VAC maximum), 50/60 Hz, power supply Class 2 (North America), Safety Extra-Low Voltage (SELV) (Europe)
Power consumption	14 VA maximum Note: VA rating does not include any power supplied to the peripheral devices connected to BOs or COs.
Ambient conditions	Operating: -40°C to 70°C (-40°F to 158°F); 10% to 90% RH noncondensing Storage: -40°C to 80°C (-40°F to 176°F); 5% to 95% RH noncondensing
Addressing	DIP switch set; valid controller device addresses 4-127 (Device addresses 0-3 and 128-255 are reserved and not valid controller addresses).
Communications bus	BACnet MS/TP, RS-485: 3-wire FC bus between the supervisory controller and other controllers 4-wire SA bus between controller, network sensors, and other SA devices, includes a lead to source 15 VDC supply power (from controller) to bus devices.
Processor	RX631 Renesas 32 bit Microcontroller
Memory	1.0 MB Flash Memory and 256 KB Random Access Memory (RAM)
Input and output capabilities	<p>IOM5711: 16 - Universal inputs: Defined as 0 VDC-10 VDC, 4 mA-20 mA, 0k-600k ohm, or Binary Dry Contact</p> <p>IOM5731: 8 - AOs: Defined as 0 VDC-10 VDC 8 - Relay outputs: (SPDT) UL Listed 1/4 hp 120 VAC, 1/2 hp 240 VAC 360 VA Pilot Duty at 120/240 VAC (B300) 3 A Non-inductive 24 - 240 VAC CE Marking: 6 (4) A N.O. or N.C. only, 240 VAC</p>
AI/AO resolution and accuracy	Input: 15-ENOB resolution Output: 16-bit resolution, +/- 200 mV accuracy in 0 VDC-10 VDC applications
Terminations	Input/Output: Fixed spade terminals SA/FC bus and supply power: 4-wire and 3-wire pluggable screw terminal blocks SA/FC bus port: RJ-12 6-pin modular jacks

Table 8: PEAK IOM57 Series technical specifications

Specification	Description
Mounting	Screw mount on a flat surface with three integral mounting clips on controller or horizontally mounted on single 35 mm DIN rail mount (preferred) inside a supplementary enclosure (minimum IP20 rating) that only qualified personnel can access.
Housing	Enclosure material: ABS and polycarbonate UL94 VSB; Self extinguishing, Plenum-Rated Protection Class: IP20 (IEC529)
Dimensions (Height x Width x Depth)	IOM5711: 146 mm x 165 mm x 56 mm (5-3/4 in. x 6-1/2 in. x 2-1/4 in.) including terminals and mounting clips IOM5731: 146 mm x 190 mm x 61 mm (5-3/4 in. x 7-1/2 in. x 2-3/8 in.) including terminals and mounting clips  Note: Mounting space requires an additional 50 mm (2 in.) space on top, bottom, and front face of controller for easy cover removal, ventilation and wire terminations.
Weight	0.5 kg (1.1 lb) maximum
Compliance	United States: UL Listed, File E107041, CCN PAZX, UL 916; FCC Compliant to CFR47, Part 15, Subpart B, Class A Canada: UL Listed, File E107041, CCN PAZX7 CAN/CSA C22.2 No.205, Signal Equipment; Industry Canada Compliant, ICES-003 Australia and New Zealand: RCM Mark, Australia/NZ Emissions Compliant
	Europe: 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. Declared as Independently Mounted, Intended for Panel Mounting, Operating Control Type 1.B, 4kV rated impulse voltage, 100.7°C ball pressure test.

The performance specifications are nominal and conform to acceptable industry standard. For application at conditions beyond these specifications, consult the local Johnson Controls® office. Johnson Controls shall not be liable for damages resulting from misapplication or misuse of its products.

Product warranty

This product is covered by a limited warranty, details of which can be found at www.johnsoncontrols.com/buildingswarranty.

Software terms

Use of the software that is in (or constitutes) this product, or access to the cloud, or hosted services applicable to this product, if any, is subject to applicable end-user license, open-source software information, and other terms set forth at www.johnsoncontrols.com/techterms. Your use of this product constitutes an agreement to such terms.

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