

# Point Multiplex Modules



## Description

The Point Multiplex Modules (XMs) interface points used for monitoring or supervisory control applications. They are perfect for adding point capacity in applications where the power and sophistication of a DCM is unnecessary. XMs reside in the NCU or NEU.

Unlike the DCM, which has universal inputs and outputs characterized by function modules, each XM has a fixed input/output point configuration. All line-voltage relays, manual override controls, and other signal conditioning circuitry are housed within the electronics of the XM. A family of XMs is available, differing only in point I/O mix.

## Features

- plug-in installation and easy commissioning
- LED indicators on front of XM show status of each input and output, and status of module itself
- built-in self-diagnostics run each time module is turned on
- XM can be installed in a 1-slot NEU, 2-slot NCU/NEU, or 5-slot NCU

## To Order

Contact your local Johnson Controls Representative.

## Applications

	XBN	XRE	XRL
<b>Point Mix</b>	32 binary inputs	8 binary inputs, 8 electrically maintained outputs	8 binary inputs, 8 magnetically latching outputs
<b>Control Type</b>	(none - input only)	2-wire control	2-wire control
<b>Applications</b>	Monitors the status of 2-position devices such as fans, pumps, or security panels. Voltage input from a starter or pilot device can also indicate that the equipment has changed state. In addition, the XBN can detect pulses from flow meters, electric utility meters, or other pulse output devices whose frequency is 10 Hz or less.	Large air handler fans, large pumps, and other 2-wire devices that require a controlled start-up after AC power loss.	Exhaust fans, which require minimal power and would be time consuming to manually restart; enabling circuits, for equipment under separate panel control; or other 2-wire devices that restart immediately after power returns.

## Selection Chart

Code Number	Description
NU-XBN101-0	Multiplex Binary (XBN)
NU-XRE101-0	Multiplex Relay Electrically Maintained (XRE)
NU-XRL101-0	Multiplex Relay Latched (XRL)

## Repair Parts

Code Number	Description
NU-XBN101-700	XBN Repair Part
NU-XRE101-700	XRE Repair Part
NU-XRL101-700	XRL Repair Part

## Point Multiplex Modules (Continued)

### Specifications

Point Multiplex Modules	
<b>Models</b>	Multiplex Binary (XBN) Multiplex Relay Electrically Maintained (XRE) Multiplex Relay Latched (XRL)
<b>Maximum Input Voltage</b>	120 VDC or 120 VAC RMS 50/60 Hz
<b>Maximum Pulse Input Frequency</b>	10 Hz or less (at 10 Hz, 12 mS < positive pulse width < 52 mS; Debounce Filter set to 2)
<b>Input Types</b>	DC - Low Thresh: 3 V, Hi Thresh: 8 V AC - Low Thresh: 2 V, Hi Thresh: 18 V Dry Contact - Low Thresh: 100 K ohms, Hi Thresh: 800 K ohms Pulse - (0-10 Hz)
<b>Output Contacts (XRE, XRL only)</b>	Form C (Make-Before-Break), electrically maintained relay
<b>Contact Rating of Each Output</b>	1 A max. @ 125 VAC, pilot duty 1 A @ 30 VDC, resistive
<b>Minimum Output Load</b>	10 mA at 5 VDC
<b>Source Power</b>	Power is from power module (NU-PWR101-0) in the NCU/NEU
<b>Ambient Operating Conditions</b>	32 to 122°F (0 to 50°C) 10% to 90% RH
<b>Ambient Storage Conditions</b>	-40 to 158°F (-40 to 70°C) 5% to 95% RH
<b>Dimensions</b>	14 in. H x 1.5 in. W x 6 in. D (355 x 36 x 152 mm)
<b>Shipping Weight</b>	2 lbs 11 oz (1.23 kg)
<b>Agency Compliance</b>	FCC Part 15 Class A UL 916 CSA C22.2 No. 205
<b>Agency Listing</b>	UL Listed and CSA Certified as part of the Metasys Network