Module Interface

8 Series
Control Interfaces
MI Link
N/A

Module interfaces control up to eight Remote Power Modules (RPMs) and are available in two configurations: either integral to a HomeWorks® 8 Series processor or as a stand-alone component. Each *HomeWorks* 8 Series processor controls up to 16 module interfaces (one of which may be integral to the processor) and/or spec grade panel interfaces.

STAND-ALONE MODULE INTERFACE (MODEL # HWI-MI-120)

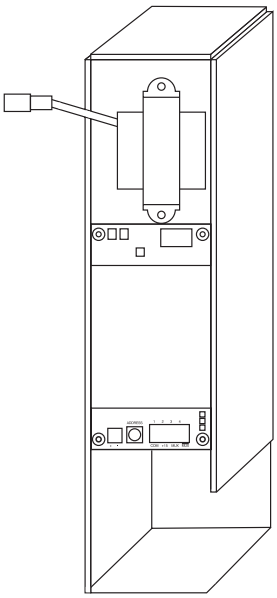
A stand-alone module interface controls up to eight RPMs in a remote power panel enclosure that does not contain a processor. In this configuration, the module interface manages communication between the RPMs and a wired processor located in a separate enclosure. A stand-alone module interface derives power from its own internal power transformer. A stand-alone module interface installs in a 59-inch (150 cm) remote power panel (model # HWI-PNL-8 and HWBP-8D) with up to eight RPMs, in a 32-inch (81 cm) remote power panel (model # HWI-PNL-5) with up to five RPMs, or in a 24-inch (61 cm) Remote Power Panel (model # HWBP-2S) with up to two RPM-4Rs.

INTEGRAL MODULE INTERFACE

Three of the 8 Series processors (model # H8P5-MI-120, H8P5-MI-H48-120 and H8P5-MI-D48-120) contain integral module interfaces, allowing up to eight RPMs to be installed in the same enclosure as a processor. Integral module interfaces receive power from the processor's internal power supply. These processors with integral module interfaces must always be installed in a 59-inch (150 cm) remote power panel (model # HWI-PNL-8). The integral module interface is always address "0".

MANUAL OVERRIDE CAPABILITIES

A manual override input is provided on each module interface, allowing a pre-determined lighting scene to be activated from designated override switches installed anywhere in the home.



Stand-Alone Module Interface (HWI-MI-120)

CONNECTION TO WIRED PROCESSOR

Each *HomeWorks* 8 Series processor has one communication link (Link 1) dedicated to the control of up to 16 MIs. This connection must be daisy-chained and requires two pair – one pair #18 AWG (1.0 mm^2), one pair #18-22 AWG (1.0-0.5 mm^2) twisted shielded – Class 2 wire. Lutron® wire model # GRX-CBL-346S-500 may be used.

Module Interface (cont.)

Specifications apply to HWI-MI-120 Stand-Alone Module Interfaces and to Module Interfaces integral to HomeWorks® Processors

Model Numbers	HWI-MI-120: Stand-Alone Module Interface. H8P5-MI-120: 8 Series Wired Processor with integral Module Interface. H8P5-MI-D48-120: 8 Series Wired Processor with integral Module Interface and D48 Dimmer Interface. H8P5-MI-H48-120: 8 Series Wired Processor with integral Module Interface and H48 Dimmer Interface.
Input Voltage	When integral to a processor, the MI is powered by 15 V⎓ provided by terminals 1 and 2 on the processor communications link connector. When a stand-alone MI is used, it is powered by a separate line-voltage feed (120 V~ 50/60 Hz) at the DIN rail terminal blocks and should not have terminal 2 connected on the processor communications link connector.
Regulatory Approvals	UL, CSA, NOM
Environment	Ambient operating temperature: 0 °C to 40 °C, 32 °F to 104 °F Ambient operating humidity: 0-90% humidity, non-condensing. Indoor use only.
Cooling Method	Passive cooling.
Low-Voltage Wire Type	Two pair – one pair #18 AWG (1.0 mm²), one pair #18-22 AWG (1.0-0.5 mm²) twisted shielded – Class 2 wire. Lutron® wire model # GRX-CBL-346S-500 may be used.
Low-Voltage Wiring Configuration	Maximum wire length of 1000 feet (305 m). Must be wired in a daisy-chain configuration. Terminators required if total cable length exceeds 50 feet (15 m).
Low-Voltage Connections	One 4-pin removable terminal block. Each of the four terminals will accept up to two #18 AWG (1.0 mm²) wires.
Addressing	Via rotary switch. Counts as 1 of 16 MI addresses on an MI link.
Diagnostics	Three LEDs for troubleshooting communications with the processor and the RPMs.
ESD Protection	Meets or exceeds the IEC 61000-4-2 standard.
Surge Protection	Meets or exceeds ANSI/IEEE standard c62.41.
Miswire Protection	All terminal block inputs are over-voltage and miswire protected against wire reversals and shorts.
Fail Safe Operations	The manual override scene is activated for all RPMs connected to the MI by closing a switch that is wired between the two manual override terminals. The switch (or relay) contacts must be rated for switching 50 mA at 30 V⎓. A single switch can be used for multiple MIs wired in parallel, but proper polarity must be maintained across all units. In this configuration, the switch must be rated for the sum of the current for all of the MIs connected (e.g., six MIs wired to a single manual override switch requires a switch rated for 300 mA at 30 V⎓).
Mounting Dimensions	*See Fig. 1, pg. 140.*
Mounting	*See Fig. 2, 3, 4, 5, pg. 140.* An integral MI is mounted within the processor housing (H8P5-MI-120, H8P5-MI-D48-120 or H8P5-MI-H48-120). A stand-alone MI mounts in the lower right-hand corner of a panel enclosure (HWI-PNL-8 , HWBP-8D, HWI-PNL-5, and HWBP-2S).
Shipping Weight	4 lbs. (1.8 kg)
Output	Compatible with HW-RPM-4U dimming module, HW-RPM-4A adaptive dimming module, HW-RPM-4FSQ fan speed module, HW-RPM-4M motor module, and HW-RPM-4R power relay module.

Module Interface (cont.)

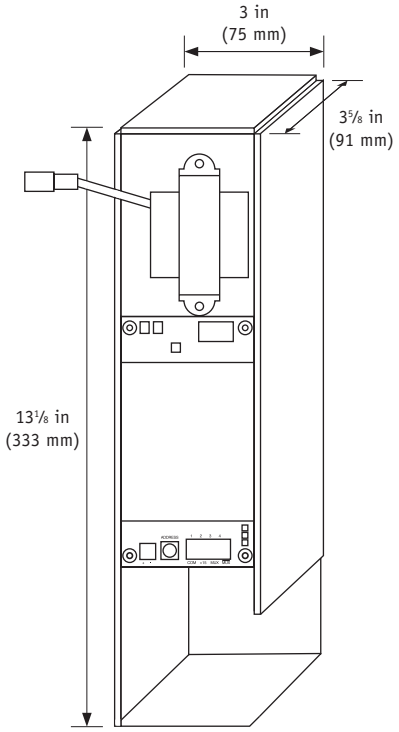


***Figure 1* – HWI-MI-120 Dimensions**

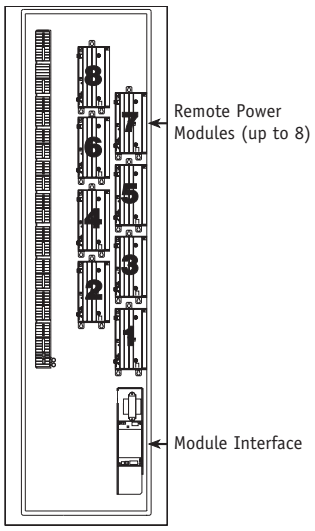


***Figure 3* - HWI-MI-120 Mounted in a HWI-PNL-8 Enclosure**

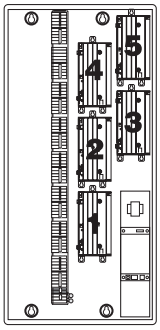


***Figure 4* - HWI-MI-120 Mounted in a HWI-PNL-5 Enclosure**

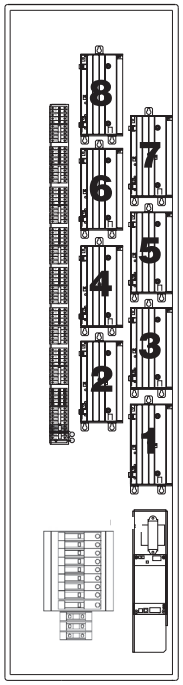


***Figure 2* – HWI-MI-120 Mounted in a HWBP-8D Enclosure**

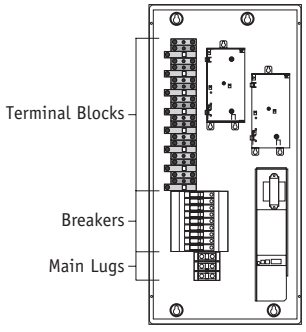


***Figure 5* – HWI-MI-120 Mounted in a HWBP-2S Enclosure**

BACK ROOM