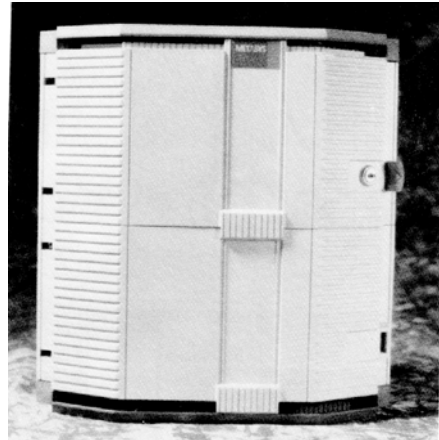


Universal Packaging Module (UPM)

The Universal Packaging Modules (UPM) are an expandable enclosure system to house a wide range of controllers and accessories. Rugged and lockable, the enclosures also provide a wealth of built-in features to reduce installation time.

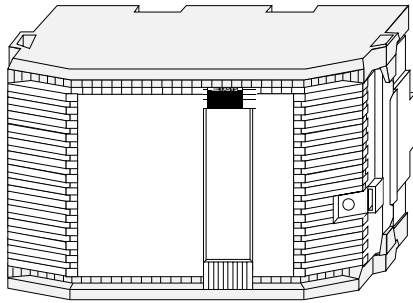
If you need additional space, the UPM's modular construction lets you increase the unit's capacity without having to unwire and rewire the controls.

A full window option allows you to view the internal equipment while keeping it secure. Powered versions include a 24 volt transformer to simplify installation.

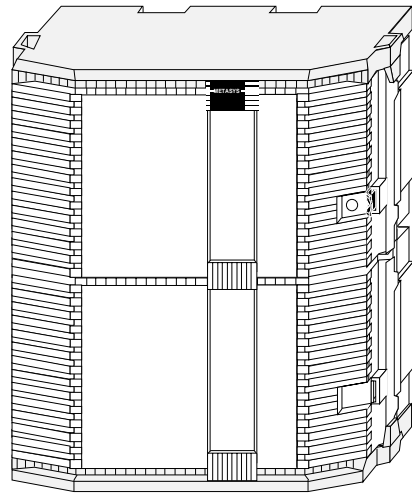


Features and Benefits

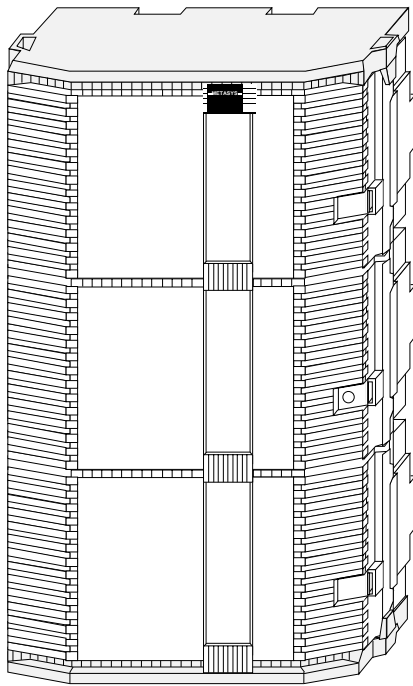
<input type="checkbox"/> Lockable	Provides security against system tampering.
<input type="checkbox"/> Multiple, Expandable Sizes	Accommodates system requirements with tiered, modular construction. Flexibility to expand without rewiring, while maintaining lightweight, durable structure.
<input type="checkbox"/> Removable Door	Allows full access for wiring during installation.
<input type="checkbox"/> Built-in Power	Integrates two utility outlets and a switched transformer (50 VA or 100 VA) for easier, less expensive installation.
<input type="checkbox"/> Ground Bonding Plane	Simplifies grounding of incoming conduit to meet NEC guidelines.
<input type="checkbox"/> Window	Allows easy viewing of internal equipment.



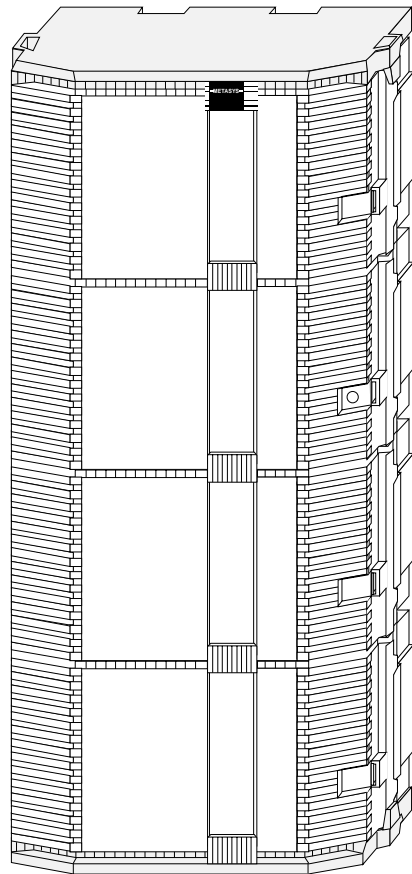
EWC10



EWC20



EWC30



EWC40

UPMPB1

Figure 1: Universal Packaging Modules

Modular System

Lightweight and rugged in structure, the Universal Packaging Modules are constructed from three standard pieces. Units are available completely assembled. Due to its modular design, however, it can be modified to individualize each enclosure to its site. Built-in features include separate line- and low-voltage wiring troughs, preformed holes to eliminate drilling, wall thicknesses to accommodate standard conduit fasteners, easily accessible grounding, and a removable door.

IMPORTANT: Before specifying the Universal Packaging Module for plenum applications, verify acceptance of exposed plastic materials in plenum areas with the local building authority. Building codes for plenum requirements vary by location. Some local building authorities accept compliance to UL 1995, Heating and Cooling Equipment, while others use different acceptance criteria.

NOTE: Assemble together no more than four units (EWC40 equivalent) to meet the 10 sq ft exposed surface area requirement of UL 1995.

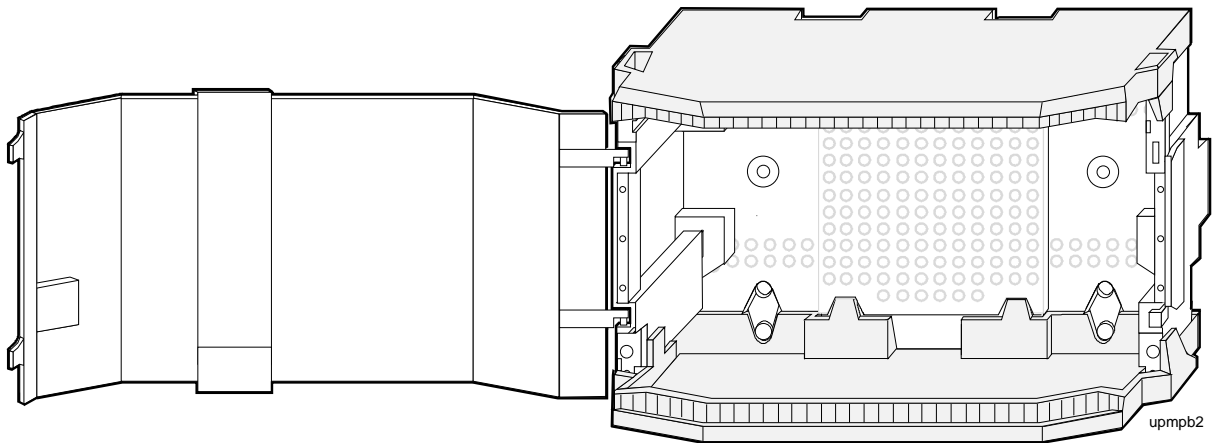


Figure 2: Universal Packaging Components

Expandability

The four available sizes allow you to choose the box you need for your current requirements. But what if the system requirements change and you need more room inside a two section unit that is already mounted?

There's no problem: remove two screws on the bottom, slide out the endcap, attach the endcap to the new backbone, and install the section. You have just added capacity to a mounted enclosure without having to rewire the original controls.

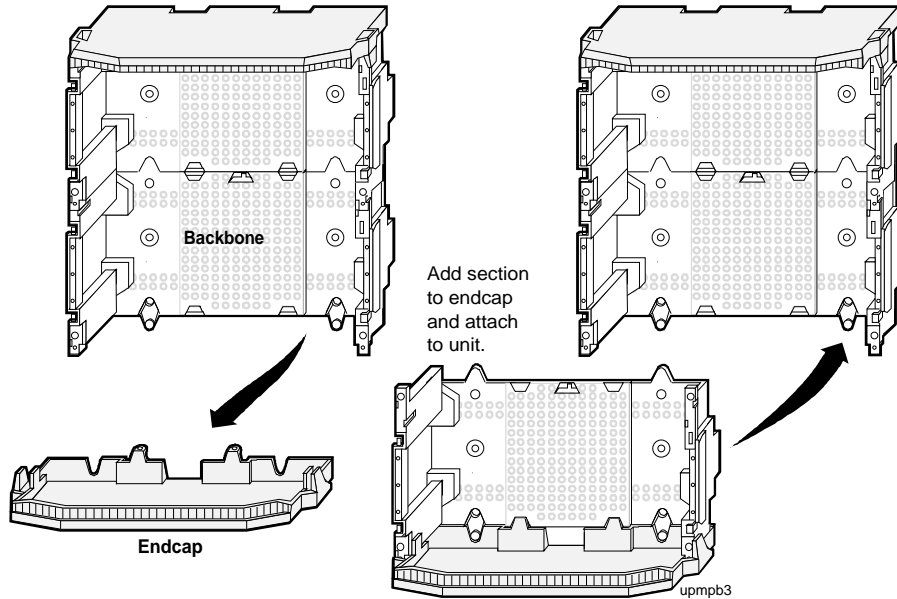


Figure 3: Expanding the Package

Power

Connecting auxiliary transformers and enclosures can take up valuable space and installation time. The power option provides an integrated 50 VA or 100 VA transformer and two utility outlets inside a metal power entrance box.

A switch activates the transformer. This allows you to eliminate the separate transformer, controller, and auxiliary gear enclosures and substitute them with a single unit that is faster and easier to install, as well as less expensive.

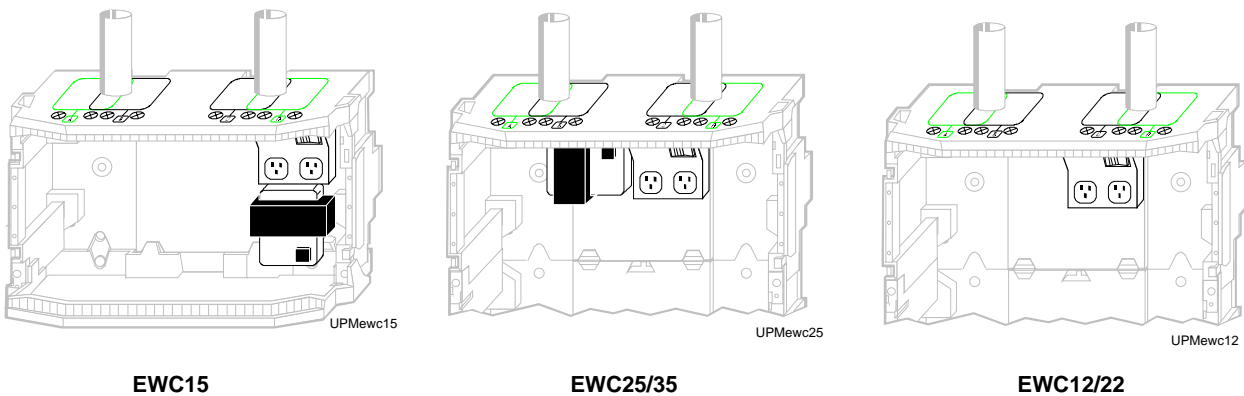


Figure 4: Power Options

Window Cover

For those who want to monitor equipment such as gauges and LEDs, an optional full-window cover provides easy viewing while still having the equipment securely locked away from unauthorized users.

The window kit allows you to create a configuration to match your application; since the kit includes a backbone, you can also expand an existing enclosure.

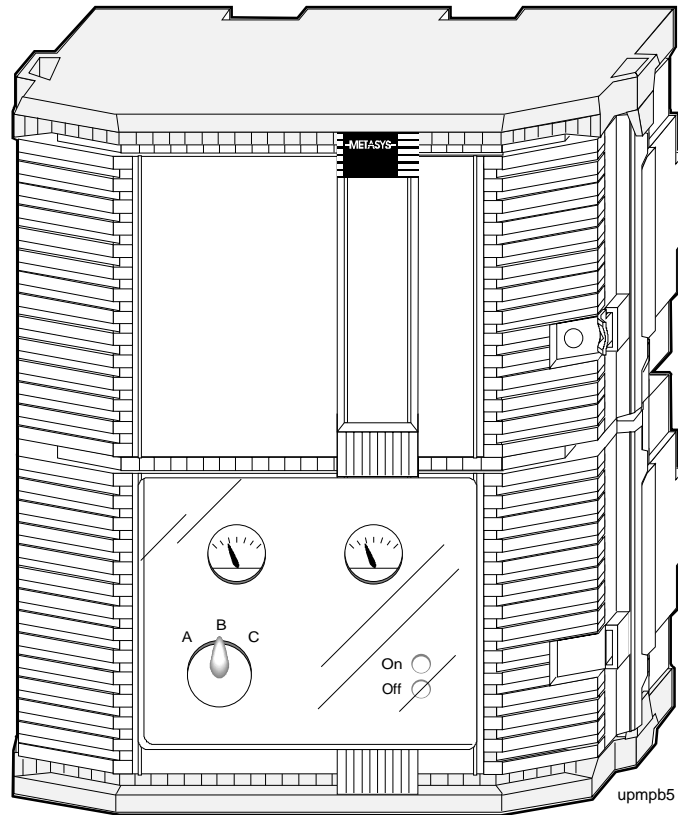


Figure 5: Enclosure Showing Equipment Mounted Behind a Window in the Lower Section

Dimensions and Configurations

The following figures detail the footprint and interior dimensions of the four Universal Packaging Modules. Use these dimensions to select the appropriately sized enclosure to fit the controller and auxiliary gear that you wish to house. Remember, in addition to these enclosures you can also use the EN-EWC100, 200, and 500 series of enclosures to house base frame controllers, or larger configurations of gauges, relays, and application specific controllers.

To assist you in laying out and wiring any configuration in these enclosures, contact the Johnson Controls Poteau Panel Unit with your design requirements.

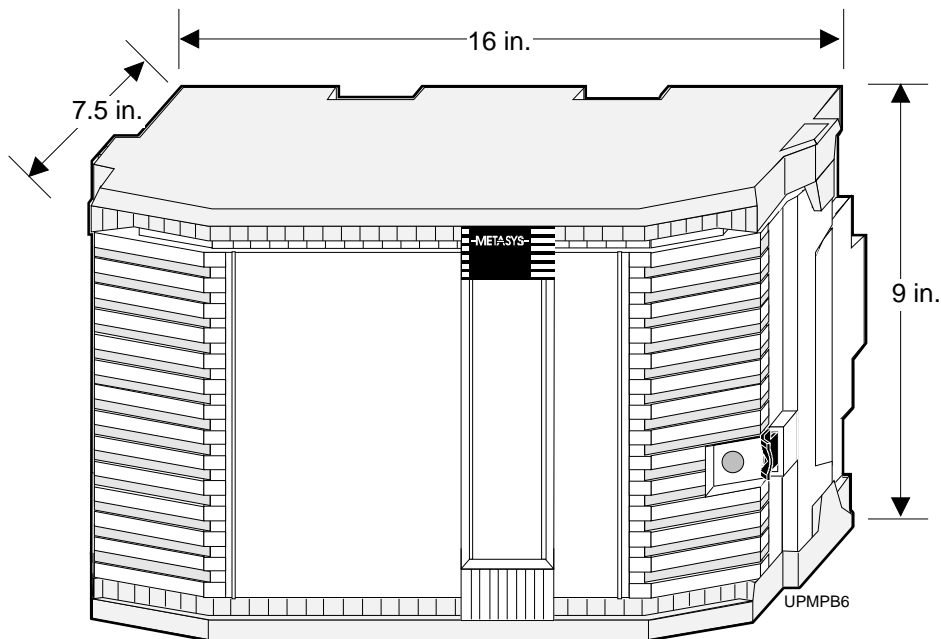
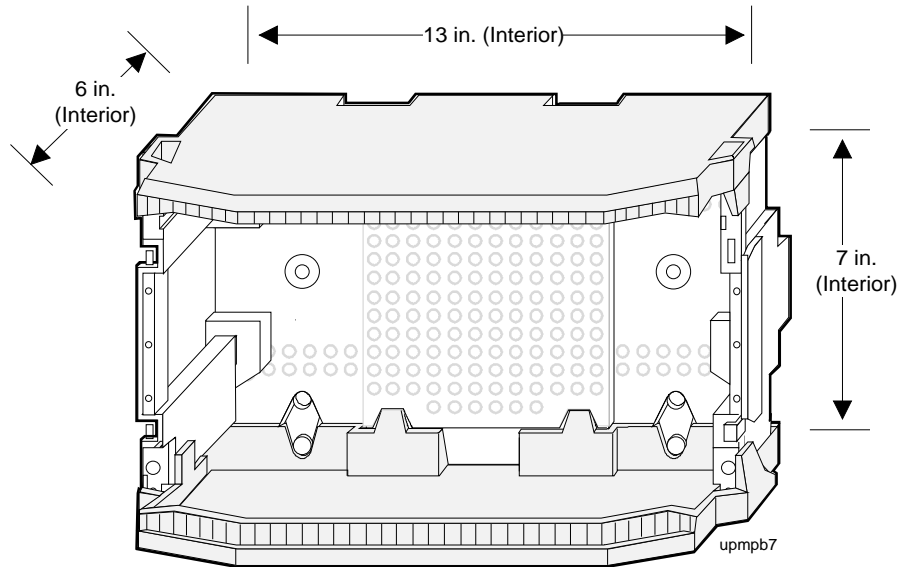


Figure 6: Outside Dimensions

Footprint dimensions (H x W x D) of the four Universal Packaging Modules:

EN-EWC10/15-0	9 in. x 16 in. x 7.5 in.	(23 x 41 x 19 cm)
EN-EWC20/25-0	16 in. x 16 in. x 7.5 in.	(41 x 41 x 19 cm)
EN-EWC30/35-0	23 in. x 16 in. x 7.5 in.	(59 x 41 x 19 cm)
EN-EWC40/45-0	30 in. x 16 in. x 7.5 in.	(77 x 41 x 19 cm)



Note: In the powered versions, make sure to account for the transformer and power box dimensions.

Figure 7: Interior Dimensions

Interior dimensions (H x W x D) of the four Universal Packaging Modules:

EN-EWC10-0	7 in. x 13 in. x 6 in.	(18 x 33 x 15 cm)
EN-EWC20-0	14 in. x 13 in. x 6 in.	(36 x 33 x 15 cm)
EN-EWC30-0	21 in. x 13 in. x 6 in.	(53 x 33 x 15 cm)
EN-EWC40-0	28 in. x 13 in. x 6 in.	(71 x 33 x 15 cm)

Split Bobbin Transformer and power box dimensions (H x W):

50 VA Transformer	3.875 x 3.25 in.	(9.6 x 8.3 cm)
100 VA Transformer	3.75 x 3.625 in.	(9.5 x 9.2 cm)
Power Box	4 x 3.75 in.	(10.2 x 9.5 cm)

The window in the optional covered window section measures 7.25 in. x 6 in. (18 x 15 cm).

Specifications

Code Number	Description	Shipping Weight	Typical Uses
Universal Packaging Modules without Power Components			
EN-EWC10-0	UPM (Single unit)	5.0 lb (2.3 kg)	Auxiliary Gear Mounting
EN-EWC20-0	UPM (Dual unit)	8.0 lb (3.6 kg)	Auxiliary Gear Mounting
EN-EWC30-0	UPM (Triple unit)	11.0 lb (5.0 kg)	Auxiliary Gear Mounting
EN-EWC40-0	UPM (Quad unit)	14.0 lb (6.4 kg)	Auxiliary Gear Mounting
Universal Packaging Modules with Power Entry Box Only			
EN-EWC12-0	UPM (Single unit)	5.5 lb (2.5 kg)	N2 Dialer
EN-EWC22-0	UPM (Dual unit)	8.5 lb (3.9 kg)	NCM300
Universal Packaging Modules with Power Entry Box and Transformer			
EN-EWC15-0	UPM (Single unit with 50 VA)	7.3 lb (3.3 kg)	UNT/VAV
EN-EWC25-0	UPM (Dual unit with 50 VA)	10.3 lb (4.7 kg)	DX-9100
EN-EWC35-0	UPM (Triple unit with 100 VA)	15.8 lb (7.2 kg)	AHU
EN-EWC45-0	UPM (Quad unit with 100 VA)	18.8 lb (8.5 kg)	Multiple Controllers
Universal Packaging Modules with Brackets			
EN-EWC13-0	UPM with 1 bracket and 50 VA	7.3 lb (3.3 kg)	Companion/Ingegrator
EN-EWC 26-0	UPM with 2 brackets and 50 VA and power box	10.4 lb (4.7 kg)	Companion with Modem
Expansion Units			
EN-EXP101-0	Expansion cover and backbone kit; endcaps not included	3.2 lb (1.5 kg)	Expand existing enclosure
EN-WIN101-0	Window cover and backbone kit; endcaps not included	3.0 lb (1.4 kg)	Showing internal equipment
Accessories			
EN-UTLBRK-0	Utility Bracket	0.5 lb (0.2 kg)	Mounting Modems
EN-KIT103-0	NT Cradle Kit	3.0 lb (1.4 kg)	Mount in NTU
AS-ZTUWMB-0	ZTU Wall Mount Bracket	0.5 lb (0.2 kg)	Mounting ZTU
Power Requirements	120 VAC at 60 Hz (1 amp)		
Standards Compliance	UL 864/UL 916 Listed and CSA Certified as part of the Metasys® system Module Housing is Plenum Rated per UL 1995, Heating and Cooling Equipment.		

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



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