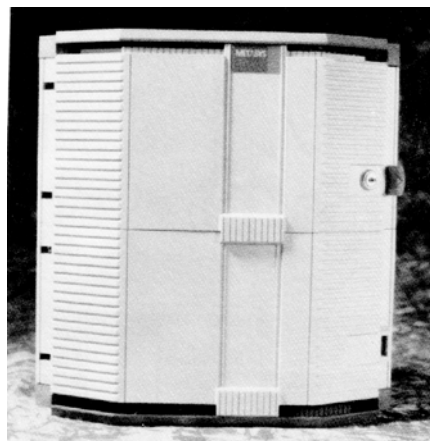


## Universal Packaging Module (UPM)

*The Universal Packaging Modules (UPMs) 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.*

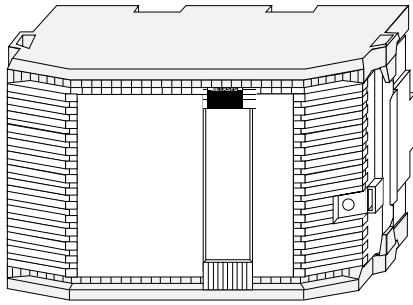
*If you need additional space, the UPM's modular construction lets you increase the unit's capacity without having to unwire and rewire the controls.*

*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.*

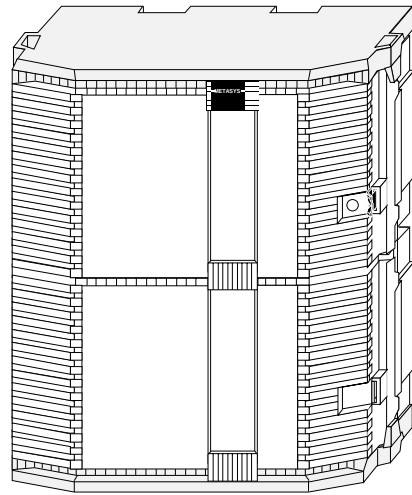


### Features and Benefits

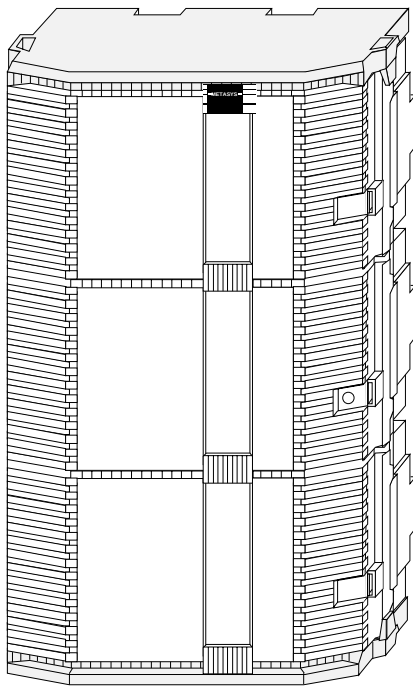
|                                                            |                                                                                                                                                              |
|------------------------------------------------------------|--------------------------------------------------------------------------------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



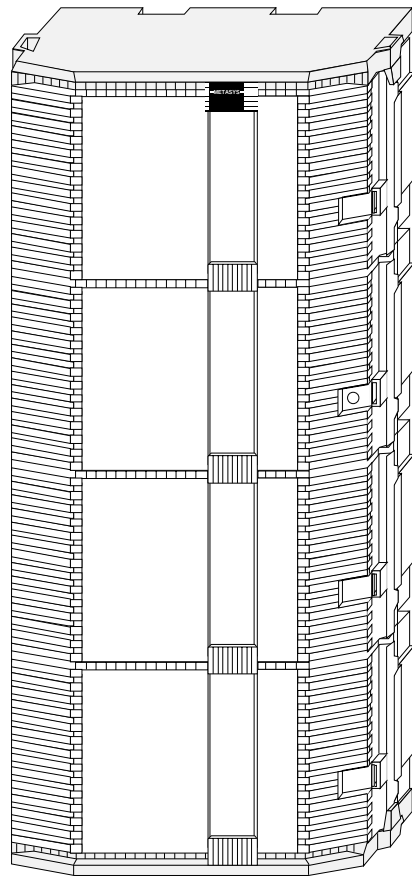
EWC10



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.

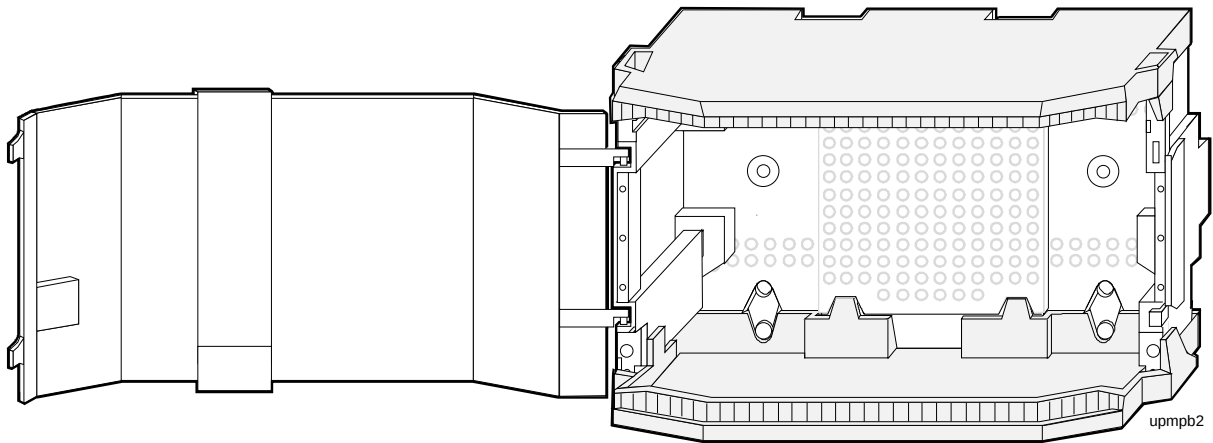


Figure 2: Universal Packaging Components

## 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 is 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.

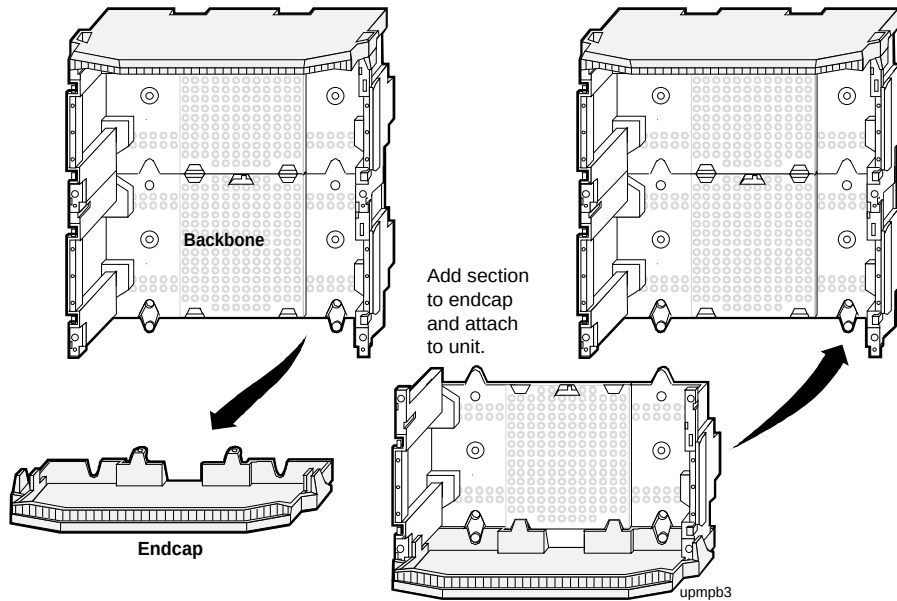
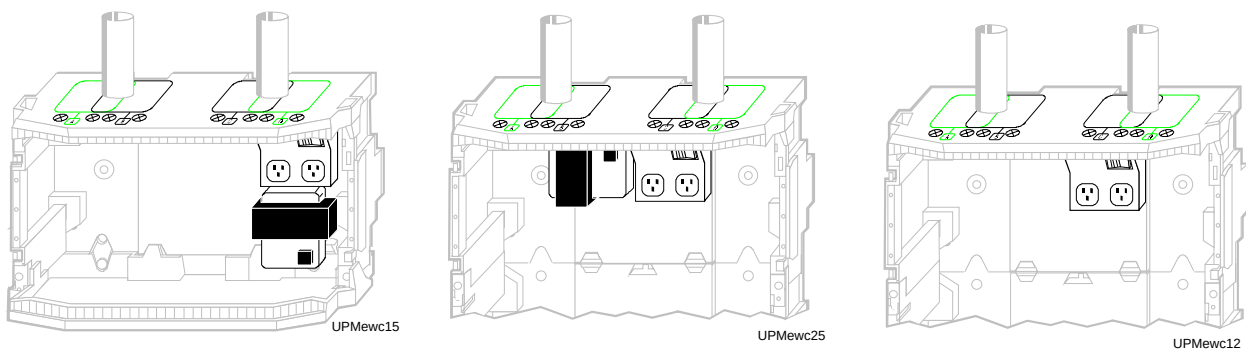


Figure 3: Expanding the Package

## 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 feature 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).



EWC15

EWC25/35

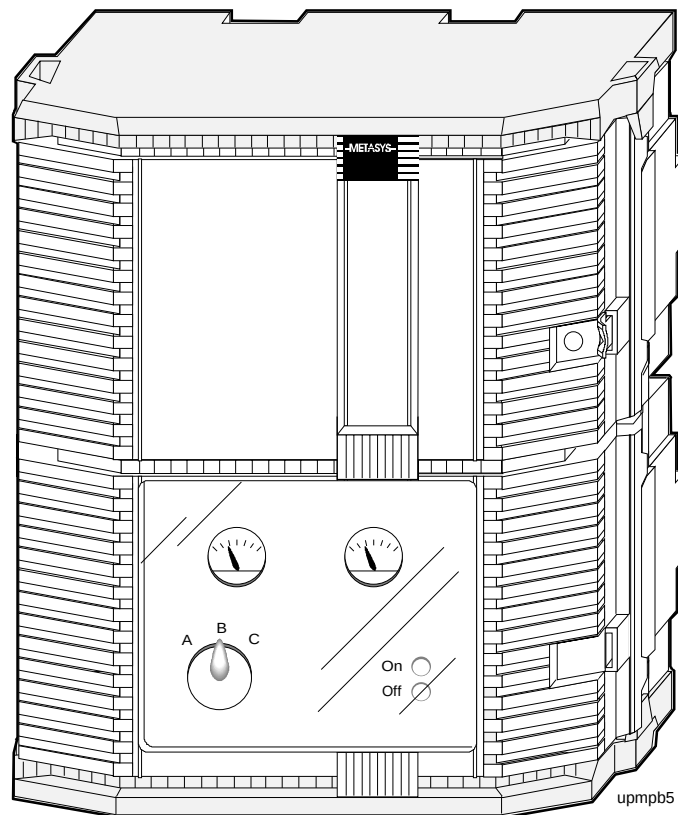
EWC12/22

Figure 4: Power Options

## Window Cover

For those who want to monitor equipment, such as gauges and Light-Emitting Diodes (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.

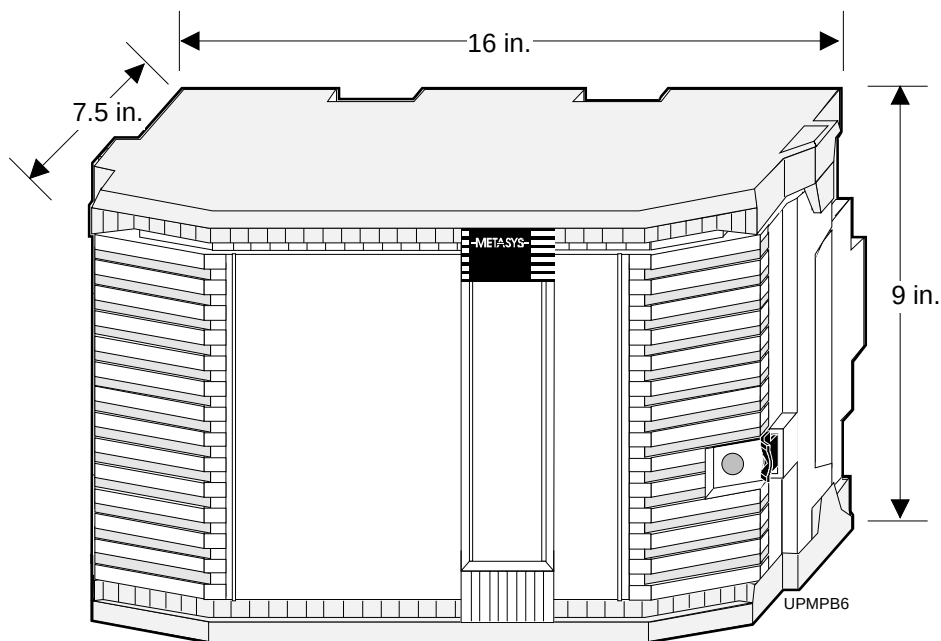


**Figure 5: Enclosure Showing Equipment Mounted behind a Window in the Lower Section**

## 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.

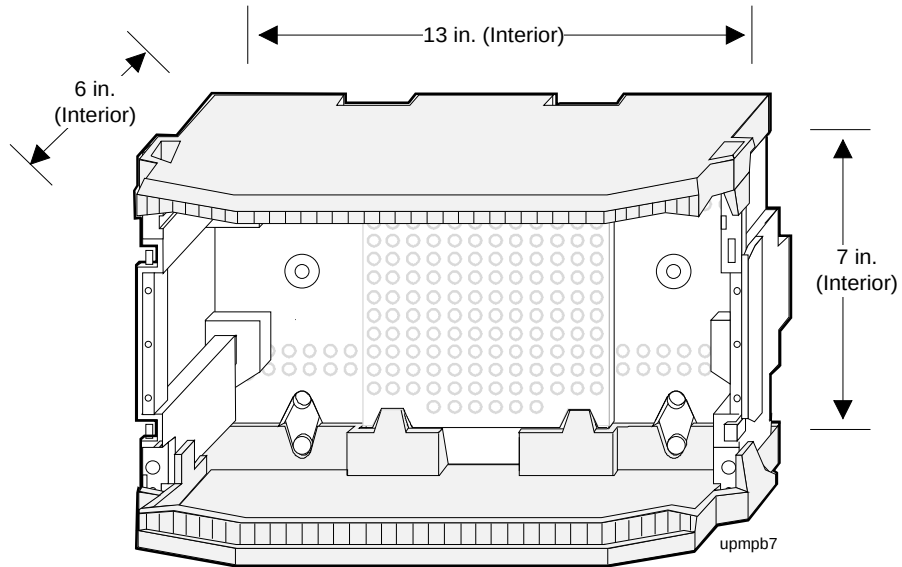
To assist you in laying out and wiring any configuration in these enclosures, contact the Johnson Controls® Poteau Panel Unit with your design requirements.



**Figure 6: Outside Dimensions**

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

|               |                                     |
|---------------|-------------------------------------|
| EN-EWC10/15-0 | 9 x 16 x 7.5 in. (23 x 41 x 19 cm)  |
| EN-EWC20/25-0 | 16 x 16 x 7.5 in. (41 x 41 x 19 cm) |
| EN-EWC30/35-0 | 23 x 16 x 7.5 in. (59 x 41 x 19 cm) |
| EN-EWC40/45-0 | 30 x 16 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 x 13 x 6 in.  | (18 x 33 x 15 cm) |
| EN-EWC20-0 | 14 x 13 x 6 in. | (36 x 33 x 15 cm) |
| EN-EWC30-0 | 21 x 13 x 6 in. | (53 x 33 x 15 cm) |
| EN-EWC40-0 | 28 x 13 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 x 6 in. (18 x 15 cm).

# Specifications

| Code Number                                                             | Description                                                                                                                                  | Shipping Weight  | Typical Uses               |
|-------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------|------------------|----------------------------|
| <b>Universal Packaging Modules without Power Components</b>             |                                                                                                                                              |                  |                            |
| 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    |
| <b>Universal Packaging Modules with Power Entry Box Only</b>            |                                                                                                                                              |                  |                            |
| 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                     |
| <b>Universal Packaging Modules with Power Entry Box and Transformer</b> |                                                                                                                                              |                  |                            |
| 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       |
| <b>Universal Packaging Modules with Brackets</b>                        |                                                                                                                                              |                  |                            |
| 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       |
| <b>Expansion Units</b>                                                  |                                                                                                                                              |                  |                            |
| 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 |
| <b>Accessories</b>                                                      |                                                                                                                                              |                  |                            |
| 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               |
| <b>Power Requirements</b>                                               | 120 VAC at 60 Hz (1 amp)                                                                                                                     |                  |                            |
| <b>Standards Compliance</b>                                             | UL 916 Listed and CSA Certified as part of the Metasys® system<br>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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