ENCLOSURES & PANELS

The Trusted Source for Innovative Control Solutions

1-717-767-6511
**NEMA 4/IP65 ENCLOSURES**

- **RUGGED STEEL CONSTRUCTION**
- **COMPLETELY SEALED FOR WASH-DOWN**
- **VERSATILE MOUNTING OPTIONS FOR MACHINE OR DESK-TOP**

**DESCRIPTION**

This series of enclosures is designed for applications requiring a water resistant instrument enclosure. These rugged enclosures are fabricated of formed steel with all seams welded to withstand NEMA 4/IP65 wash-down applications. The kits are coated with a durable flat black polyurethane finish.

Electrical connections to the enclosed instrument are easily made through a removable access panel at the rear of the enclosure. The panel can be drilled to accept conduit fittings or other types of wiring connectors.

The enclosures can be mounted free-standing or securely fastened to a mounting surface with brackets which are provided with each enclosure. The brackets also allow the enclosures to be raised and/or tilted from the mounting surface in order to achieve the most favorable operating position. Self-stick rubber pads are provided which can be applied to the bottom of the enclosure. These rubber pads will protect the mounting surface and are particularly useful for free-standing installations.

**DIMENSIONS In inches (mm)**

<table>
<thead>
<tr>
<th>DESCRIPTION</th>
<th>A</th>
<th>B</th>
<th>C</th>
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<tbody>
<tr>
<td>Legend &amp; Libra Series NEMA 4 Enclosure</td>
<td>3.50” (88.9)</td>
<td>4.75” (120.6)</td>
<td>7.00” (177.8)</td>
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**ORDERING INFORMATION**

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<tr>
<td>Legend &amp; Libra Series NEMA 4/IP65 Enclosure</td>
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<tr>
<td>Apollo &amp; IM Series NEMA 4/IP65 Enclosure</td>
<td>ENC50000</td>
</tr>
<tr>
<td>Gemini Series NEMA 4/IP65 Enclosure</td>
<td>ENC60000</td>
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</table>
Installation

The RLC ASTRO LINE products (GEMINI, LIBRA, APOLLO) have side openings in the case for panel mounting latches, special latches are supplied with each enclosure to engage the latch openings and securely retain the instrument. The installation procedure is as follows:

1. Verify that the enclosure brackets are installed into the enclosure with the bracket screws backed out more than half way from the brackets but keeping the screw head flush against the enclosure rear.
2. Slide the panel gasket over the rear of the unit until it is against the back of the bezel.
3. Hold the unit on its side so that a side bracket opening is facing up and insert the unit into the enclosure front opening.
4. The bracket hook should fall into the unit bracket opening. Keeping the meter and enclosure on their side, turn the bracket screw tight.
5. Flip the meter and enclosure to the other side.
6. The other bracket hook should fall into the unit bracket opening. Keeping the meter and enclosure on their side, turn the other bracket screw tight.
7. Verify that both screws are tight enough so that the front panel gasket is compressed to at least 50% of it original thickness.
8. Install any connectors or conduit fittings to the rear access panel. Make the desired wiring connections to the enclosed unit.
9. Install the rear panel gasket with the adhesive side against the enclosure and the screw clearance holes aligned with the threaded holes in the enclosure.
10. After all electrical connections have been made, attach the rear access panel to the rear of the enclosure with the four screws and washers provided.
NEMA 4 PAX SERIES ENCLOSURES

ENC5B & ENC5C - PLASTIC ENCLOSURES

- RUGGED POLYCARBONATE CONSTRUCTION
- COMPLETELY SEALED FOR NEMA 4X/IP65 WASH-DOWN
- EASY MOUNTING OPTIONS

DESCRIPTION

These enclosures are designed for applications requiring a water resistant instrument enclosure. The ENC5B and ENC5C enclosures are fabricated of polycarbonate and are designed to withstand NEMA 4X/IP65 wash-down applications. The enclosures must be drilled to accept conduit fittings or other types of wiring connectors. The enclosures can be used free-standing, or securely fastened to a mounting surface. The enclosures are precut for either one or two meters. When properly installed, the meter and the enclosure can withstand NEMA 4X wash-down applications.

Electrical connections to the enclosed instrument are easily made by drilling the desired location on the back or side of the enclosure. Select the proper drill size to accommodate the conduit fitting or other wire connector. To maintain the enclosure NEMA 4X rating, sealed connectors must be used. Also enclosed are wall fastening lugs, which can be used to easily mount the enclosure to a wall.

ORDERING INFORMATION

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<tr>
<td>ENC5B</td>
<td>NEMA 4X/IP65 Enclosure for One PAX Meter</td>
<td>ENC5B000</td>
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<tr>
<td>ENC5C</td>
<td>NEMA 4X/IP65 Enclosure for Two PAX Meters</td>
<td>ENC5C000</td>
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</table>

For More information on Pricing, Enclosures & Panel Mount Kits, refer to the RLC Catalog or contact your local RLC Distributor.

ENC5B AND ENC5C INSTALLATION

- It is recommended to wire the unit before mounting it in the enclosure to ensure good electrical connections.
- The following steps outline the most common sequence for installing a unit.

1. Determine the location of the conduit fitting and drill the necessary hole. Install the fitting and bring the wiring into the enclosure.
2. Slide the panel gasket over the rear of the unit to the back of the bezel.
3. Install the unit through the opening in the front of the lid until the bezel flange contacts the panel.
4. Slide the mounting clip over the rear of the unit until the mounting clip is against the inside of the enclosure.

   The mounting clip has latching features which engage into mating features on the unit’s housing.

   Note: It is necessary to hold the unit in place when sliding the mounting clip into position.

5. While holding the unit in place, push the panel latch over the rear of the unit so that the tabs of the panel latch engage in the slots on the case. The panel latch should be engaged in the farthest forward slot possible. To achieve a proper seal, tighten the latch screws evenly until the unit is snug in the panel (Torque to approximately 7 in-lbs [79 N-cm]). Do not over-tighten the screws.
6. If the gasket is not adequately compressed, and the mounting screws can no longer be turned, loosen the mounting screws and check that the mounting clip is latched as close as possible to the inside of enclosure. Repeat the procedure for tightening the screws.
7. Connect the necessary wires to the unit for the application desired.
8. Assemble the enclosure with the screws provided. Alternately tighten each screw to ensure uniform gasket pressure.
**DESCRIPTION**

The ENC5A enclosure is fabricated of formed steel with all seams welded to withstand NEMA 4/IP65 wash-down applications. The kit is coated with a durable flat black polyurethane finish.

Electrical connections to the enclosed instrument are easily made through a removable access panel at the rear of the enclosure. The panel must be drilled to accept conduit fittings or other types of wiring connectors.

The enclosure can be used free-standing or securely fastened to a mounting surface with brackets which are provided with each enclosure. The brackets also allow the enclosure to be raised and/or tilted from the mounting surface in order to achieve the most favorable operating position. Self-stick rubber pads are provided which can be applied to the bottom of the enclosure. These rubber pads will protect the mounting surface and are particularly useful for free-standing installations.

**DIMENSIONS In inches (mm)**

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Value (inches)</th>
<th>Value (mm)</th>
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<tbody>
<tr>
<td>Width</td>
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<td>139.7</td>
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<tr>
<td>Height</td>
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</tr>
<tr>
<td>Depth</td>
<td>3.25</td>
<td>82.6</td>
</tr>
<tr>
<td>1/8&quot; THICK FOAM RUBBER PAD</td>
<td>15</td>
<td>3.8</td>
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**ENC5A INSTALLATION**

1. Mark the location on the rear panel for your wire connector or conduit fitting, and drill the necessary hole. Connect your wire connector or fitting to the rear panel.
2. Remove the center sections of the front and rear panel gaskets. These centers contain the optional foam rubber feet for the enclosure.
3. Apply the adhesive side of the panel gasket to the front and rear openings of the enclosure. DO NOT APPLY THE ADHESIVE SIDE OF THE GASKET TO THE FRONT OR REAR PANELS.
4. Install the unit to the front panel according to the standard panel installation instructions found in the product literature.
5. Route the wires to be connected to the unit from the conduit fitting through the rear of the enclosure and out the front.
6. Connect the necessary wires to the unit for the application desired.
7. Attach the front and rear panels to the enclosure with the screws and washers provided. Alternately tighten each screw to ensure uniform gasket compression. Visually inspect the sponge rubber gasket. The gasket should be compressed to about 75 to 80% of its original thickness.
8. For a free-standing enclosure, apply the self-stick foam rubber pads to the features on the bottom of the enclosure to protect the mounting surface.
9. To securely mount the enclosure, attach the adjustable mounting brackets to the enclosure using the washers and bolts provided. Secure the mounting brackets to the desired mounting location. The mounting screws to attach the brackets to your surface are not provided due to the variety of installation options available.

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<td>ENC5A</td>
<td>NEMA 4/IP65 Enclosure for PAX &amp; Short Apollo</td>
<td>ENC5A000</td>
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For More information on Pricing, Enclosures & Panel Mount Kits, refer to the RLC Catalog or contact your local RLC Distributor.
**MODEL ENC8 - NEMA 4 ENCLOSURES FOR CUB4, CUB5, DT8 & DT9 UNITS**

**ENC8A & ENC8B - PLASTIC ENCLOSURES**

**DESCRIPTION**
These enclosures are designed for applications requiring a water resistant instrument enclosure. The enclosures are fabricated of polycarbonate and are designed to withstand NEMA 4X/IP65 wash-down applications. The enclosures must be drilled to accept conduit fittings or other types of wiring connectors. The enclosures can be used free-standing, or securely fastened to a mounting surface.

**ORDERING INFORMATION**

<table>
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<th>DESCRIPTION</th>
<th>PART NUMBER</th>
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</thead>
<tbody>
<tr>
<td>ENC8A000</td>
<td>Plastic Enclosure for single units</td>
<td>ENC8A000</td>
</tr>
<tr>
<td>ENC8B000</td>
<td>Plastic Enclosure for units with an MLPS1 attached</td>
<td>ENC8B000</td>
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</tbody>
</table>

For More information on Pricing, Enclosures & Panel Mount Kits, refer to the RLC Catalog or contact your local RLC Distributor.

**ENC8A INSTALLATION**

- It is recommended to wire the unit before mounting it in the enclosure to ensure good electrical connections. The following steps outline the most common sequence for installing a unit without an MLPS1 attached.
- 1. Determine the location of the conduit fitting and drill the necessary hole. Install the fitting and bring the wiring into the enclosure.
- 2. Slide the panel gasket over the rear of the unit to the back of the bezel.
- 3. Assemble nut fastener and mounting screw onto both sides of the mounting clip. The tip of the screw should not project from the hole in mounting clip.
- 4. Install the unit through the opening in the front of the lid until the bezel flange contacts the panel.
- 5. Slide the mounting clip over the rear of the unit until the mounting clip is against the inside of the enclosure. The mounting clip has latching features which engage into mating features on the unit’s housing.

  Note: It is necessary to hold the unit in place when sliding the mounting clip into position.

- 6. Alternately tighten each screw to ensure uniform gasket pressure. Visually inspect the front panel gasket. The gasket should be compressed to about 75 to 80% of its original thickness (Recommended torque is 28 to 36 in-oz.). If not, gradually turn mounting screws to further compress the gasket.
- 7. If the gasket is not adequately compressed, and the mounting screws can no longer be turned, loosen the mounting screws and check that the mounting clip is latched as close as possible to the inside of enclosure. Repeat the procedure for tightening the screws.
- 8. Connect the necessary wires to the unit for the application desired.
- 9. Assemble the enclosure with the screws provided. Alternately tighten each screw to ensure uniform gasket pressure.
ENC8B w/ MLPS1 Installation

Installing a unit with an MLPS1 attached requires some planning. It is recommended that the unit with the MLPS1 attached be temporarily installed in the enclosure to determine the best location for the conduit fitting to avoid interference with the MLPS1.

1. Determine the location of the conduit fitting and drill the necessary hole. Install the fitting and bring the wiring into the enclosure.
2. Slide the panel gasket over the rear of the unit to the back of the bezel.
3. Remove the common and V+ screw terminals from the rear of the unit (save for later use) and replace them with the stand-offs (supplied with the MLPS1).
4. Assemble nut fastener and mounting screw onto both sides of the mounting clip. The tip of the screw should not project from the hole in mounting clip.
5. Install the unit through the opening in the front of the lid until the bezel flange contacts the panel mounted gasket.
6. Slide the mounting clip over the rear of the unit until the mounting clip is against the inside of the enclosure. The mounting clip has latching features which engage into mating features on the unit’s housing.
   
   Note: It is necessary to hold the unit in place when sliding the mounting clip into position.

7. Alternately tighten each screw to ensure uniform gasket pressure. Visually inspect the front panel gasket. The gasket should be compressed to about 75 to 80% of its original thickness (Recommended torque is 28 to 36 in-oz.). If not, gradually turn mounting screws to further compress the gasket.
8. If the gasket is not adequately compressed, and the mounting screws can no longer be turned, loosen the mounting screws and check that the mounting clip is latched as close as possible to the inside of enclosure. Repeat the procedure for tightening the screws.

9. Mount the MLPS1 and optional sensor wires needed, to the stand-offs using the screw terminals from the unit with the supplied square washers.
10. Connect AC power to the terminal block of the MLPS1.
11. After all electrical connections have been made, assemble the enclosure with the screws provided. Alternately tighten each screw to ensure uniform gasket pressure.

ENC8 - STEEL ENCLOSURE

DESCRIPTION
This enclosure is designed for use with the CUB4, CUB5, DT8 & DT9 units. The enclosures are large enough to accommodate a Micro-line Power Supply (MLPS1) attached to the unit. These rugged enclosures are fabricated of formed steel with all seams welded to withstand NEMA 4/IP65 wash-down applications. The kits are coated with a durable black polyurethane finish.

The holes for conduit fittings or other types of wiring connectors can be drilled through the removable rear access panel, or through the enclosure itself. The enclosures can be free standing or securely fastened to a mounting surface with the brackets and hardware found in the mounting kit (provided with the enclosure). The brackets also allow the enclosure to be raised and/or tilted from the mounting surface in order to achieve the most favorable operating position. Provided are four self-stick foot pads that can be applied to the bottom of the enclosure to protect the mounting surface. The foot pads are particularly useful for free standing installations.

DIMENSIONS In inches (mm)

ORDERING INFORMATION

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<thead>
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<tr>
<td>EN8</td>
<td>NEMA 4/IP65 ENCLOSURE</td>
<td>ENC80000</td>
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</table>

For More information on Pricing, Enclosures & Panel Mount Kits, refer to the RLC Catalog or contact your local RLC Distributor.
**ENC8 INSTALLATION**

It is recommended to wire the unit before mounting it in the enclosure to ensure good electrical connections. The following steps outline the most common sequence for installing a unit without an MLPS1 attached.

1. Determine the location of the conduit fitting and drill the necessary hole.
2. Apply adhesive side of panel gasket to rear enclosure opening.

**DO NOT APPLY THE ADHESIVE SIDE OF THE GASKET TO THE ACCESS PANEL.**

3. Slide the panel gasket over the rear of the unit to the back of the bezel.
4. Assemble nut fastener and mounting screw onto both sides of the mounting clip. The tip of the screw should not project from the hole in mounting clip.
5. Route the wire to be connected to the unit from the conduit fitting through the mounting clip, and then through the rear of the enclosure and out the front.
6. Connect the necessary wires to the unit for the application desired.
7. Install the unit through the opening in the front of the enclosure until the bezel flange contacts the panel.
8. Slide the mounting clip over the rear of the unit until the mounting clip is against the inside of the enclosure. The mounting clip has latching features which engage into mating features on the unit's housing.

**Note:** It is necessary to hold the unit in place when sliding the mounting clip into position.

9. Alternately tighten each screw to ensure uniform gasket pressure. Visually inspect the front panel gasket. The gasket should be compressed to about 75 to 80% of its original thickness (Recommended torque is 28 to 36 in-oz.). If not, gradually turn mounting screws to further compress the gasket.
10. If the gasket is not adequately compressed, and the mounting screws can no longer be turned, loosen the mounting screws and check that the mounting clip is latched as close as possible to the inside of the enclosure. Repeat the procedure for tightening the screws.
11. Attach the rear access panel to the enclosure with the eight screws provided.

**ENC8 w/ MLPS1 Installation**

Installing a unit with an MLPS1 attached requires some planning. It is recommended that the unit with the MLPS1 attached be temporarily installed in the enclosure to determine the best location for the conduit fitting to avoid interference with the MLPS1.

1. Mark the location of the conduit fitting and drill the necessary hole.
2. Apply adhesive side of panel gasket to rear enclosure opening.

**DO NOT APPLY THE ADHESIVE SIDE OF THE GASKET TO THE ACCESS PANEL.**

3. Slide the panel gasket over the rear of the unit to the back of the bezel.
4. Assemble nut fastener and mounting screw onto both sides of the mounting clip. The tip of the screw should not project from the hole in mounting clip.
5. Route the wire to be connected to the unit from the conduit fitting through the mounting clip, and then through the rear of the enclosure and out the front.
6. Connect the necessary wires to the unit for the application desired.
7. Install the unit through the opening in the front of the enclosure until the bezel flange contacts the panel.
8. Slide the mounting clip over the rear of the unit until the mounting clip is against the inside of the enclosure. The mounting clip has latching features which engage into mating features on the unit's housing.

**Note:** It is necessary to hold the unit in place when sliding the mounting clip into position.

9. Alternately tighten each screw to ensure uniform gasket pressure. Visually inspect the front panel gasket. The gasket should be compressed to about 75 to 80% of its original thickness (Recommended torque is 28 to 36 in-oz.). If not, gradually turn mounting screws to further compress the gasket.
10. If the gasket is not adequately compressed, and the mounting screws can no longer be turned, loosen the mounting screws and check that the mounting clip is latched as close as possible to the inside of the enclosure. Repeat the procedure for tightening the screws.
11. Attach the rear access panel to the enclosure with the eight screws provided.

12. Connect AC power to the terminal block of the MLPS1.

13. Mount the MLPS1 and optional sensor wires needed, to the stand-offs using the screw terminals from the unit with the supplied square washers.
14. After all electrical connections have been made, attach the rear access panel to the enclosure with the eight screws provided.
15. Alternately tighten each screw to ensure uniform gasket pressure. Visually inspect the sponge rubber gasket. The gasket should be compressed to about 75 to 80% of its original thickness.
MOUNTING THE ENCLOSURE

1. Self-stick foot pads may be applied to the features on the bottom of the enclosure to protect the mounting surface.

2. To securely mount the enclosure, attach the adjustable mounting brackets to the enclosure using the plastic washers and screws. Mounting brackets may be attached to the top or bottom of the enclosure.

3. Secure the adjustable mounting brackets to mounting location with the screws provided.
ENC9-NEMA 4/IP65 LPAX ENCLOSURE

The ENC90000 NEMA 4/IP65 enclosure provides a means of mounting the LPAX display in dirty or washdown environments. The enclosure comes with all the gaskets, hardware (except the mounting screws), and brackets required to base, ceiling, or wall mount the LPAX display. The mounting screws to attach the brackets to your surface are not provided due to the variety of installation options available.

ENCLOSURE ASSEMBLY

1. Before drilling a hole in the enclosure for your wire connector or fitting, ensure that the location you have chosen allows enough clearance around the MPAX module.
2. Remove the center section of the gasket provided with the LPAX, and slide it over the rear of the display and onto the mounting studs.
3. Insert the LPAX into the enclosure as illustrated. Install six #10-32 keps nuts (supplied with the LPAX) and tighten evenly for uniform gasket compression. The gasket should be compressed to about 75 to 80% of its original thickness. Do not overtighten the nuts.
4. Run the wires through the hole that was drilled in the enclosure, and attach them to the LPAX. Wiring instructions are provided in the appropriate PAX bulletin shipped with the MPAX Module.
5. Remove the center section of the rear cover gasket. Apply the gasket to the rear panel of the enclosure by inserting the screws through the panel and into the holes in the gasket. Position the panel on the enclosure and start all of the screws. Alternately tighten each screw to ensure uniform gasket compression. The gasket should be compressed to about 75 to 80% of its original thickness.
6. To securely mount the enclosure, attach the adjustable mounting brackets to the enclosure using the washers and screws provided.
7. Secure the mounting brackets to the desired mounting location.

ORDERING INFORMATION

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<td>ENC9</td>
<td>NEMA 4 Enclosure for LPAX</td>
<td>ENC90000</td>
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**SHROUD**

The optional shroud enhances the readability of the LPAX unit in areas with high intensity overhead light sources. The shroud can be used in conjunction with any installation (panel mount, enclosure, or mounting brackets). When properly installed, the shroud will not affect the integrity of a NEMA 4 installation.

**DIMENSIONS In inches (mm)**

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<th>SHROUD</th>
<th>LPAX w/GASKET</th>
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<td>2.75 (69.85)</td>
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<td>5.00 (127)</td>
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<td>25 (6.35)</td>
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**INSTALLATION**

1. Remove the center section of the gasket provided with the LPAX, and slide it over the rear of the display and onto the mounting studs.
2. Orient the shroud and gasket as shown in the assembly figure, and place it over the LPAX. The studs of the LPAX should now be protruding through the rear of the shroud.
3. Follow the remaining installation instructions for panel mounting, bracket mounting or enclosure mounting as appropriate.

**ORDERING INFORMATION**

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**MBLPAX-MOUNTING BRACKETS**

The MBLPAX mounting brackets provide an easy way to base, wall, or ceiling mount the LPAX display. The MBLPAX kit comes with two sets of brackets, and most of the hardware to mount the LPAX at virtually any angle. The screws to attach the brackets to your surface are not provided due to the variety of installation options available.

**DIMENSIONS In inches (mm)**

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<th>BASE MOUNT</th>
<th>CEILING MOUNT</th>
<th>ASSEMBLY</th>
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<td>3.25 (82.55)</td>
<td>4.75 (120.65)</td>
<td>Rubber Washer</td>
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<td>4.75 (120.65)</td>
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<td>0.2 (5.1) D/A</td>
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<td>Fastener Bracket</td>
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**NEMA 4 1/16 DIN SERIES ENCLOSURES**

**ENC11A & ENC11B - PLASTIC ENCLOSURES**

- RUGGED POLYCARBONATE CONSTRUCTION
- COMPLETELY SEALED FOR NEMA 4X/IP65 WASH-DOWN
- EASY MOUNTING OPTIONS

**DESCRIPTION**

These enclosures are designed for applications requiring a water resistant instrument enclosure. The ENC11A and ENC11B enclosures are fabricated of polycarbonate and are designed to withstand NEMA 4X/IP65 wash-down applications. The enclosures must be drilled to accept conduit fittings or other types of wiring connectors. The enclosures can be used free-standing, or securely fastened to a mounting surface. The enclosures are precut for either one or two meters. When properly installed, the meter and the enclosure can withstand NEMA 4X wash-down applications.

Electrical connections to the enclosed instrument are easily made by drilling the desired location on the back or side of the enclosure. Select the proper drill size to accommodate the conduit fitting or other wire connector. To maintain the enclosure NEMA 4X rating, sealed connectors must be used. Also enclosed are wall fastening lugs, which can be used to easy mount the enclosure to a wall.

**ORDERING INFORMATION**

<table>
<thead>
<tr>
<th>MODEL NO</th>
<th>DESCRIPTION</th>
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<tr>
<td>ENC11B</td>
<td>NEMA 4X/IP65 Enclosure for Two 1/16 DIN Meters</td>
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**ENC11A AND ENC11B INSTALLATION**

It is recommended to wire the unit before mounting it in the enclosure to ensure good electrical connections. The following steps outline the most common sequence for installing a unit.

1. Determine the location of the conduit fitting and drill the necessary hole. Install the fitting and bring the wiring into the enclosure.
2. Slide the panel gasket over the rear of the unit to the back of the bezel.
3. Install the unit through the opening in the front of the lid until the bezel flange contacts the panel.
4. Slide the mounting clip over the rear of the unit until the mounting clip is against the inside of the enclosure. The mounting clip has latching features which engage into mating features on the unit’s housing. 
   - Note: It is necessary to hold the unit in place when sliding the mounting clip into position.
5. While holding the unit in place, push the panel latch over the rear of the unit so that the tabs of the panel latch engage in the slots on the case. The panel latch should be engaged in the farthest forward slot possible. To achieve a proper seal, tighten the latch screws evenly until the unit is snug in the panel (Torque to approximately 7 in-lbs [79 N-cm]). Do not over-tighten the screws.
6. If the gasket is not adequately compressed, and the mounting screws can no longer be turned, loosen the mounting screws and check that the mounting clip is latched as close as possible to the inside of enclosure. Repeat the procedure for tightening the screws.
7. Connect the necessary wires to the unit for the application desired.
8. Assemble the enclosure with the screws provided. Alternately tighten each screw to ensure uniform gasket pressure.
ENC11 - STEEL ENCLOSURE

- RUGGED STEEL CONSTRUCTION
- COMPLETELY SEALED FOR WASH-DOWN
- VERSATILE MOUNTING OPTIONS FOR MACHINE OR DESKTOP

DESCRIPTION
This enclosure is designed for applications requiring a water resistant instrument enclosure. The enclosure is fabricated of formed steel with all seams welded to withstand NEMA 4/IP65 wash-down applications. The kit is coated with a durable flat black polyurethane finish.

Electrical connections to the enclosed instrument are easily made through a removable access panel at the rear of the enclosure. The panel must be drilled to accept conduit fittings or other types of wiring connectors.

The enclosure can be used free-standing or securely fastened to a mounting surface with brackets which are provided with each enclosure. The brackets also allow the enclosure to be raised and/or tilted from the mounting surface in order to achieve the most favorable operating position. Self-adhering rubber pads are provided which can be applied to the bottom of the enclosure. These rubber pads will protect the mounting surface and are particularly useful for free-standing installations.

DIMENSIONS  In inches (mm)

ORDERING INFORMATION

<table>
<thead>
<tr>
<th>MODEL NO.</th>
<th>DESCRIPTION</th>
<th>PART NUMBER</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENC11</td>
<td>NEMA 4 Enclosure for 1/16 DIN Units</td>
<td>ENC11000</td>
</tr>
</tbody>
</table>
**NEMA 4/IP65 LARGE DISPLAY ENCLOSURE & SHROUD FOR EPAX**

- **LIGHT-WEIGHT ALUMINUM CONSTRUCTION**
- **COMPLETELY SEALED FOR WASH-DOWN**
- **MOUNTING CHANNELS FOR VERSATILE INSTALLATION**

**DESCRIPTION**

The NEMA 4/IP65 Large Display Enclosure is designed to protect the EPAX from dust and hose directed water, when properly installed. This light-weight all aluminum unit utilizes welded seams and neoprene gaskets to meet NEMA 4/IP65 requirements. A textured, polyurethane coating protects against corrosion and is scratch resistant. Figure 1 below shows the overall dimensions of the Enclosure. The Display Enclosure with Mounting Channels weighs 9 pounds (4.1 Kg).

**DIMENSIONS In inches (mm)**

<table>
<thead>
<tr>
<th>Measurement</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>21.00 (533.4)</td>
<td>Overall including Screwheads</td>
</tr>
<tr>
<td>1.25 (31.8)</td>
<td>Housing Only</td>
</tr>
<tr>
<td>7.5 (19.1)</td>
<td></td>
</tr>
<tr>
<td>10.00 (254)</td>
<td></td>
</tr>
<tr>
<td>27.50 (698.5)</td>
<td></td>
</tr>
<tr>
<td>6.50* (165.1)</td>
<td></td>
</tr>
<tr>
<td>7.11** (180.6)</td>
<td></td>
</tr>
</tbody>
</table>

* Housing Only  ** Overall Including Screwheads

**TYPICAL INSTALLATIONS FOR NEMA 4/IP65 ENCLOSURE**

Removing the rear panel of the enclosure allows access to the Display for service. Either the rear panel or housing may be drilled to accept sealed conduit fittings, liquid-tight cable fittings or other types of wiring connectors. The enclosure may be attached to horizontal surfaces located above or below it, using the mounting channels provided.

**MOUNTING**

Provided with the enclosure are two ¼-20 UNC x 1" hex bolts, two ¼-20 UNC "strut nuts", and two ¼" washers. The "strut nuts" can be installed anywhere in the channel by inserting them, spring side down, into the channels, then rotating them 90 degrees clockwise until the notches engage with the lips of the channel. The bolts and washers provided allow mounting to surfaces ¼" to ½" thick (6.4 to 12.7 mm). Use longer bolts for mounting to thicker surfaces. Bolts fabricated from materials other than steel are not recommended.

**Figure 1**

**Figure 2**

BASEMOUNT WITH WATERTIGHT CABLE CONNECTOR ENTERING THROUGH REAR PANEL.

**Figure 3**

SUSPENDED FROM CONDUIT WITH SEALED FITTINGS. (SHOWN WITH SHROUD).

SUSPENDED FROM CONDUIT WITH SEALED FITTINGS. (SHOWN WITH SHROUD).

BEAM MOUNT WITH SEALED CONDUIT ENTERING FROM RIGHT SIDE.
**ASSEMBLY AND INSTALLATION PROCEDURE**

1. Install the two mounting channels on the enclosure housing using the four #8-32 screws provided and then insert the strut nuts (provided). Invert enclosure if base mounting.

2. If the wiring is to be routed through the housing, make sure that the mounting channels are oriented properly before drilling, so the Display will be readable. Wiring is generally brought into the right side of the housing or rear panel, closest to the terminals of the MPAX module. Drill the proper size hole in the housing or rear panel for the wiring connector or sealed conduit fitting and attach the fitting(s).

3. Before installing the Display into the housing, be sure that the mounting channels are oriented properly for the type of installation planned. Place the gasket that is supplied with the Display over the studs extending from the front panel of the display.

4. If using the shroud, refer to the Shroud Installation Procedure. Place the Display with gasket through the holes in the housing as shown at right. Working back and forth across the stud pattern, install the #10-32 keps nuts supplied with the Display on the studs. Tighten firmly.

5. Mount the housing, using the strut nuts and steel ¼-20 UNC bolts and washers, as shown in figure 4.

6. Connect the wires to the Display as per the instructions included with the personality board.

7. Remove the center section of the rear panel gasket. Apply the gasket to the rear panel of the enclosure by inserting the #8-32 screws through the panel and into the holes in the gasket. Position the panel on the housing, start all of the screws, then firmly tighten them in a pattern working back and forth across the rear panel.

**DIMENSIONS FOR THE EPAX DISPLAY SHROUD**

The optional EPAX Display Shroud enhances the readability of the Displays that are installed in areas with high intensity overhead light sources. The Shroud can be used with the EPAX Display in any installation, (panel mount, NEMA 4/IP65 Enclosure, or Universal Mounting Bracket). When properly assembled, the Shroud will not affect the integrity of a NEMA 4/IP65 installation. The Shroud weighs 1.0 pounds (0.45 Kg).

**SHROUD INSTALLATION PROCEDURE**

Installing The Shroud On An EPAX Display In A NEMA 4/IP65 Enclosure Or Panel

1. Place a gasket over the studs extending from the rear of the front panel of the Display.

2. Orient the shroud as shown in Figure 6, and place it over the display. The studs of the display should now be protruding through the rear of the shroud.

3. Place the other gasket over the studs.

4. Install the unit into the panel or enclosure using the #10-32 keps nuts that are supplied with the Display. Tighten the nuts firmly.

**ORDERING INFORMATION**

<table>
<thead>
<tr>
<th>MODEL NO.</th>
<th>DESCRIPTION</th>
<th>PART NUMBERS</th>
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</thead>
<tbody>
<tr>
<td>ENC12</td>
<td>NEMA 4/IP65 Enclosure for EPAX</td>
<td>ENC12000</td>
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<tr>
<td>SHR</td>
<td>Shroud for EPAX</td>
<td>SHREPAX0</td>
</tr>
<tr>
<td>EN/SH</td>
<td>EPAX NEMA 4/IP65 Enclosure and Shroud</td>
<td>EPAXENSH</td>
</tr>
</tbody>
</table>
**MODEL BMK3 & BMK4 - BASE MOUNT KITS**

**DESCRIPTION**

The Model BMK3 and 4 Base Mount Kits provide the necessary equipment for base mounting various units. The kits are coated with a durable flat black polyurethane finish and consist of two mounting legs which attach to the customer’s base panel, using the hardware provided.

Model PMK3 and 4 are separate front panels, available for different sized units. After mounting the units to the appropriate PMK panel, the entire assembly is then attached to the mounting legs.

**MOUNTING PROCEDURE**

1. Mark and drill holes (3/16” Dia.) in base panel for attaching the base mount legs. Use the appropriate Model PMK panel as a template for marking the mounting hole locations. NOTE: RECOMMENDED MINIMUM BASE PANEL THICKNESS IS 1/8” TO SUPPORT THE WEIGHT OF THE INDICATOR WITHOUT PANEL DISTORTION.

2. Attach the base mount legs to the base panel using the machine screws and nuts provided or user supplied hardware if panel thickness exceeds 1/4”.

3. Mount the indicator to the Model PMK panel, utilizing the mounting clips provided, in accordance with the panel mounting instructions supplied with the individual unit.

4. Attach the PMK panel and unit assembly to the base mount legs by using the self-tapping screws provided.

**BASE MOUNT DIMENSIONS  In inches (mm)**

**BMK3**

- PMK 3
- 3.38 (85.9)
- 6.43 (163.3)
- 0.075 (1.9)

[For use with Legend, Lynx, Libro, C48, T48, T16 & P16 Units]

**BMK4**

- PMK 4
- 3.00 (76.2)
- 7.30 (185.4)
- 0.075 (1.9)

[For use with Gemini, Apollo, IM, PAX, TCU, PCU, TSC & PSC Units]
**ORDERING INFORMATION**

<table>
<thead>
<tr>
<th>MODEL NO.</th>
<th>DESCRIPTION</th>
<th>PART NUMBER</th>
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<tbody>
<tr>
<td>BMK 3</td>
<td>Base Mount Kit For Legend, Lynx And Libra</td>
<td>BMK30000</td>
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<tr>
<td>BMK 4</td>
<td>Base Mount Kit For Gemini, Apollo, IM, PAX, TCU, PCU, TSC And PSC</td>
<td>BMK40000</td>
</tr>
<tr>
<td>PMK 3A</td>
<td>Mounting Panel For Lynx</td>
<td>PMK3A000</td>
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<tr>
<td>PMK 3B</td>
<td>Mounting Panel For Libra And Legend</td>
<td>PMK3B000</td>
</tr>
<tr>
<td>PMK 3C</td>
<td>Mounting Panel For C48, T48, P16 And T16</td>
<td>PMK3C000</td>
</tr>
<tr>
<td>PMK 4A</td>
<td>Mounting Panel For Gemini</td>
<td>PMK4A000</td>
</tr>
<tr>
<td>PMK 4B</td>
<td>Mounting Panel For IM, Apollo, PAX, TCU, PCU, TSC And PSC</td>
<td>PMK4B000</td>
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</table>
MODEL BMK6, BMK7 & BMK7A - BASE MOUNT KIT FOR CUB4, CUB5 & DT8 UNITS

DESCRIPTION

The BMK6, BMK7 and BMK7A base mounts are designed for use with the CUB4, CUB5, and DT8 units. The BMK7 is large enough to accommodate a Micro-line Power Supply (MLPS) attached to a CUB4 or DT8. The BMK7A will accommodate a Micro-line Power Supply (MLPS) attached to a CUB5.

The wires can either be brought through the panel on which the unit is mounted, or through the hole(s) in the enclosure itself. Grommets are provided to insert in the hole(s) on the base mount (where applicable) when wires are routed through it. The grommets are in the accessory bag with each base mount unit, along with four nuts and bolts for mounting.

The base mounts are constructed of steel with a textured black finish.

DIMENSIONS In inches (mm)

BMK6 - OPEN BASE MOUNT KIT
   (Without MLPS)

BMK7/BMK7A - CLOSED BASE MOUNT KIT
   (With or Without MLPS)

INSTALLATION

BMK6 - Open Base Mount

Before attaching the BMK6 to the panel or frame, it is recommended to wire and mount the unit to ensure good electrical connections. The following steps outline the most common sequence for installing a unit without an MLPS attached.

1. Install the grommet (provided in the accessory bag) in the hole in the base mount.
2. Assemble nut fastener and mounting screw onto both sides of the mounting clip. The tip of the screw should not project from the hole in mounting clip.
3. Slide the panel gasket over the rear of the unit to the back of the bezel. Then install the unit through the opening in the front of the base mount until the bezel flange makes contact.
4. Slide the mounting clip over the rear of the unit until the mounting clip is against the inside of the base mount. The mounting clip has latching features which engage into mating features on the unit’s housing. Note: It is necessary to hold the unit in place when sliding the mounting clip into position.
5. Alternately tighten each screw to ensure uniform gasket compression.
6. Connect the necessary wires from the grommet to the unit.
7. Mount the base mount enclosure to the panel or frame as application requires. Four bolts and nuts are provided with the Base Mount Kit.
**INSTALLATION**

**BMK7/BMK7A - Closed Base Mount**

Before attaching the BMK7/BMK7A to the panel or frame, it is recommended to wire and mount the unit to ensure good electrical connections. The following steps outline the most common sequence for installing a unit with an MLPS attached.

1. Install the grommets (provided in the accessory bag) in the holes in the base mount.
2. Slide the panel gasket over the rear of the unit to the back of the bezel.
3. Remove the common and V+ screw terminals from the rear of the unit (save for later use), and replace them with the hex drive stand-offs with round washers (supplied with the MLPS).
4. Assemble nut fastener and mounting screw onto both sides of the mounting clip. The tip of the screw should not project from the hole in mounting clip.
5. Route the wires from the grommets, through the mounting clip, into the rear of the base mount and out the front.
6. Connect the wires necessary for the application to the unit.
7. Install the unit through the opening in the front of the base mount until the bezel flange makes contact.
8. Slide the mounting clip over the rear of the unit until the mounting clip is against the inside of the base mount. The mounting clip has latching features which engage into mating features on the unit’s housing.

**Note:** It is necessary to hold the unit in place when sliding the mounting clip into position.

9. Alternately tighten each screw to ensure uniform gasket compression.
10. Connect AC power to the terminal block of the MLPS.

**Note:** Make sure the AC selector switch is set to the appropriate position before applying power to the unit.
11. Mount the MLPS and optional sensor wires needed to the stand-offs using the screw terminal from the unit with the supplied square washers.
12. Mount the base mount enclosure to the panel or frame as application requires. Four bolts and nuts are provided with the Base Mount Kit.

**ORDERING INFORMATION**

<table>
<thead>
<tr>
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<th>DESCRIPTION</th>
<th>MODEL NO</th>
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<tbody>
<tr>
<td>BMK60000</td>
<td>OPEN BASE MOUNT KIT</td>
<td>BMK</td>
</tr>
<tr>
<td>BMK70000</td>
<td>CLOSED BASE MOUNT KIT (DT8, CUB4)</td>
<td>CLOSED BASE MOUNT KIT (CUB5)</td>
</tr>
<tr>
<td>BMK7A0000</td>
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</table>

For More information on Pricing, Enclosures & Panel Mount Kits refer to the RLC Catalog or contact your local RLC Distributor.
**MODEL BMK8 - BASE MOUNT KIT FOR CUB7**

**DESCRIPTION**
The BMK8 base mount is designed for use with the CUB7 series products. Wire feed to the CUB7 unit may be through the existing panel/frame or through the hole in the BMK8 itself.

The base mount is constructed of steel with a textured black finish and includes four mounting bolts and nuts.

**DIMENSIONS**

<table>
<thead>
<tr>
<th>In inches (mm)</th>
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</thead>
<tbody>
<tr>
<td>1.25 (31.8)</td>
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<tr>
<td>1.75 (44.5)</td>
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<tr>
<td>2.00 (50.8)</td>
<td></td>
</tr>
<tr>
<td>2.03 (51.6)</td>
<td></td>
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<tr>
<td>6.0 (15.2)</td>
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**ORDERING INFORMATION**

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<tr>
<th>MODEL No.</th>
<th>DESCRIPTION</th>
<th>PART NUMBER</th>
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</thead>
<tbody>
<tr>
<td>BMK8</td>
<td>CUB7 BASE MOUNT KIT</td>
<td>BMK80000</td>
</tr>
</tbody>
</table>

For More information on Pricing, Enclosures & Panel Mount Kits refer to the RLC Catalog or contact your local RLC Distributor.

**INSTALLATION**

1. Mark and drill holes (5/32") in existing panel using the BMK8 as a template. An addition hole may be cut in the existing panel for wire feed.
2. Remove the panel latch (mounting clip) from the CUB7 unit and insert the mounting screws (supplied with the CUB7) on both sides of panel latch. The tip of the screw should not project from the hole in the panel latch (mounting clip).
3. Slide the CUB7 through the cut out in the BMK8 until the bezel flange contacts the base mount. The CUB7 panel gasket is optional.
4. Slide the panel latch (mounting clip) over the rear of the unit and towards the front of the unit until it latches firmly against the inside of the base mount. Note: It is necessary to hold the CUB7 in place when sliding the mounting clip into position.
5. Alternately tighten mounting screws.
6. Route wires through existing panel wire hole or through wire hole on base mount and connect to the appropriate terminals on the CUB7.
7. Mount the CUB7/base mount assembly to the existing panel or frame utilizing the four bolts and nuts provided with the base mount.
1. Remove the panel latch (mounting clip) from the PAX meter unit and insert the mounting screws (supplied with the PAX) on both sides of panel latch. The tip of the screw should not project from the hole in the panel latch (mounting clip).

2. The PAX meter may be wired after the unit has been mounted in the adapter frame, in which case continue with Step 3. If pre-wiring the PAX is more convenient, skip to the pre-wiring step at the end of this installation procedure before returning to Step 3.

3. Slide the PAX meter through the cut out in the BMK9 and then slide the panel latch (mounting clip) over the rear of the PAX.

4. Continue sliding the PAX meter until the bezel flange contacts the adapter frame. The PAX panel gasket is optional.

5. Slide the panel latch (mounting clip) towards the front of the unit until it latches firmly against the inside of the adapter frame. Note: It is necessary to hold the PAX meter in place when sliding the mounting clip into position.

6. Alternately tighten mounting screws through the rear access holes of the adapter frame.

7. Apply both DIN rail feet to the rear of the adapter frame. The two latching pins of the rail foot are positioned into the mating holes on the adapter frame. Slight pressure applied to the center of the rail foot will snap foot into locking position.

8. Wire PAX meter appropriately.

9. To install the complete assembly on a T style rail, angle the assembly so that the top groove of both rail feet are located over the top lip of the rail. Push the assembly towards the rail until it snaps into place.

10. To remove the assembly from the rail, place a screwdriver behind the bottom groove of the foot rail and slightly pry upwards to release first rail foot. Apply same procedure to second rail foot and remove complete assembly.

Pre-wire PAX

2a. Route wires through the panel latch (mounting clip) and then through the front cut out of the adapter frame from the inside to the outside. Wire PAX meter appropriately. Continue with installation at Step 3 above.
DESCRIPTION
The model BMK11 can be used to mount a CUB5 meter or a Micro Line Power Supply (MLPS) in various applications. Need a DIN rail mounted display? Simply add the DIN rail clips to the back of the BMK11, install your meter and snap it on the rail. If your application requires an inexpensive power supply, simply mount an MLPS to the BMK11 and snap it to the rail. For base mount application, just use the appropriate mounting screws to securely fasten the BMK11. Nothing could be easier.

DIMENSIONS  In inches (mm)

ORDERING INFORMATION

<table>
<thead>
<tr>
<th>MODEL NO.</th>
<th>DESCRIPTION</th>
<th>PART NUMBER</th>
</tr>
</thead>
<tbody>
<tr>
<td>BMK11</td>
<td>CUB5 or MLPS DIN Rail Base  Mount Kit</td>
<td>BMK11000</td>
</tr>
</tbody>
</table>
**MLPS INSTALLATION**

1. Using the two nuts supplied with the BMK11, affix standoffs from MLPS hardware pack as indicated in the diagram at left.

2. Snap the MLPS over the standoffs into the BMK11 as indicated in the diagram.

3. Attach the MLPS to the standoffs using the square washers and SEMS terminal screws included with MLPS hardware pack.

4. Assembly can be wired at this time, or after the mounting is completed.

5. For DIN RAIL mounting, insert the two plastic feet as shown in the diagram at right. Angle the assembly so that the top groove of both rail feet are located over the top lip of the rail. Rotate the assembly towards the rail until it snaps into place.

6. For Base Mount, use the holes indicated in the diagram at left, and screw or bolt the assembly to the desired mounting surface. User is responsible for selecting the appropriate screw or bolt to provide mounting to the desired surface. Base mount holes in the BMK11 are designed for #8 hardware.

7. To remove the MLPS from the BMK11, slide a small screwdriver between the MLPS and the latch wall. Draw the latch away from the MLPS until disengaged. Repeat procedure on the other side. Once the latches are released, remove the MLPS from the BMK11.

---

**CUB5 INSTALLATION**

1. Remove the panel latch (mounting clip) from the indicator. Insert the indicator into the BMK11 per diagram at right. Verify indicator is fully seated and latches have engaged. With latches properly engaged the indicator will not pull out of the BMK11.

2. Wire the indicator.

3. For DIN RAIL mounting, insert the two plastic feet as shown in the diagram at right. Angle the assembly so that the top groove of both rail feet are located over the top lip of the rail. Rotate the assembly towards the rail until it snaps into place.

4. To remove the assembly from the rail, place a screwdriver behind one of the rail feet and draw the rail foot away from the rail disengaging it from the rail. Apply the same procedure to the second rail foot and remove the complete assembly from the rail.

5. For Base Mount, use the holes indicated in the diagram at right, and screw or bolt the assembly to the desired mounting surface. User is responsible for selecting the appropriate screw or bolt to provide mounting to the desired surface. Base mount holes in the BMK11 are designed for #8 hardware.

6. To remove the indicator from the BMK11, slide a small screwdriver into the slot provided in the latch. Draw the latch away from the indicator until disengaged. Repeat the procedure on the other side. Once the latches are released, remove the indicator from the BMK11.
MODELS PMK5, PMK7, and PMK7A - PANEL MOUNT ADAPTER KITS

PMK5 - 1/4 DIN TO 1/8 DIN ADAPTER

This panel mount adapter kit is used to mount 1/8 DIN instruments, vertically or horizontally into an existing 1/4 DIN panel cut-out. The kit includes two durable steel mounting plates painted black and a neoprene gasket. The Adapter Kit, when used with a unit which has NEMA 4/IP65 specifications, will meet NEMA 4/IP65 requirements when properly installed. Red Lion Controls 1/8 DIN products include Temperature and Process Control Units (Models TCU, TSC, PCU, and PSC), and PAX Series.

DIMENSIONS In inches (mm)

**MOUNTING PLATE**

- 1.77 (45)
- 3.62 (92)
- 4.50 (114.3)

**ADAPTER PLATE**

- 1.77 (45)
- 3.62 (92)
- 4.50 (114.3)
- 0.06 (1.5)
- 0.04 (1.02)

INSTALLATION

**TYPICAL VERTICAL MOUNT INSTALLATION**

1. Remove the paper backing from the adhesive side of the adapter gasket (included with adapter kit) and carefully apply the gasket to the front of the existing panel cut-out.

2. Apply the panel gasket (provided with the unit) to one side of the mounting plate. Slide the mounting plate over the unit with the gasket facing the Bezel of the unit.

3. Insert the unit with mounting plate into the panel cut-out from the front. Slide the adapter plate over the rear of the unit. The protrusion on the adapter plate is designed to fit into the existing 1/4 DIN panel cut-out to properly position the unit.

4. Refer to the installation section of the manual, supplied with the instrument, to complete the installation.

ORDERING INFORMATION

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<th>DESCRIPTION</th>
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<td>PMK5</td>
<td>Panel Mount Adapter Kit (1/4 DIN TO 1/8 DIN)</td>
<td>PMK500000</td>
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<tr>
<td>PMK7</td>
<td>Panel Mount Adapter Kit (1/4 DIN TO 1/16 DIN)</td>
<td>PMK700000</td>
</tr>
<tr>
<td>PMK7A</td>
<td>Panel Mount Adapter Kit (1/4 DIN TO CUB)</td>
<td>PMK7A0000</td>
</tr>
</tbody>
</table>
**PMK7 - 1/4 DIN TO 1/16 DIN ADAPTER**

This panel mount adapter kit is used to mount 1/16 DIN instruments, into an existing 1/4 DIN panel cut-out. The kit includes two durable steel mounting plates painted black and a neoprene gasket. The Adapter Kit, when used with a unit which has NEMA 4/IP65 specifications, will meet NEMA 4/IP65 requirements when properly installed. Red Lion Controls 1/16 DIN products include Temperature and Process Control Units (Models T48, T16, P48, and P16), and Model C48 Counters and Timers.

**DIMENSIONS In inches (mm)**

**MOUNTING PLATE**

- 1.77 (45) x 4.50 (114.3)

**ADAPTER PLATE**

- 1.77 (45) x 4.50 (114.3)

**INSTALLATION**

**TYPICAL INSTALLATION**

1. Remove the paper backing from the adhesive side of the adapter gasket (included with adapter kit) and carefully apply the gasket to the front of the existing panel cut-out.
2. Apply the panel gasket (provided with the unit) to one side of the mounting plate. Slide the mounting plate over the unit with the gasket facing the Bezel of the unit.
3. Insert the unit with mounting plate into the panel cut-out from the front. Slide the adapter plate over the rear of the unit. The protrusion on the adapter plate is designed to fit into the existing 1/4 DIN panel cut-out to properly position the unit.
4. Refer to the installation section of the manual, supplied with the instrument, to complete the installation.
**PMK7A - 1/4 DIN TO CUB ADAPTER**

This panel mount adapter kit is used to mount CUB4, CUB5, DT8 and DT9 instruments, into an existing 1/4 DIN panel cut-out. The kit includes two durable steel mounting plates painted black and a neoprene gasket. The Adapter Kit, when used with a unit which has NEMA 4/IP65 specifications, will meet NEMA 4/IP65 requirements when properly installed.

**INSTALLATION**

**TYPICAL INSTALLATION**

1. Remove the paper backing from the adhesive side of the adapter gasket (included with adapter kit) and carefully apply the gasket to the front of the existing panel cut-out.

2. Apply the panel gasket (provided with the unit) to one side of the mounting plate. Slide the mounting plate over the unit with the gasket facing the Bezel of the unit.

3. Insert the unit with mounting plate into the panel cut-out from the front. Slide the adapter plate over the rear of the unit. The protrusion on the adapter plate is designed to fit into the existing 1/4 DIN panel cut-out to properly position the unit.

4. Refer to the installation section of the manual, supplied with the instrument, to complete the installation.
The panel mount adapter kit is used to mount 1/16 DIN instruments into existing vertical or horizontal 1/8 DIN panel cut-outs. The kit includes two black painted durable steel mounting plates and a sponge rubber gasket. The Adapter Kit, when used with a unit which has NEMA 4/IP65 specifications, will meet NEMA 4/IP65 requirements when properly installed. Red Lion Controls 1/16 DIN products include Temperature and Process Control Units (Models T48, and P48), and the C48 units.

INSTALLATION
TYPICAL VERTICAL MOUNT INSTALLATION

1. Remove the paper backing from the adhesive side of the adapter gasket (included with adapter kit) and carefully apply the gasket to the front of the existing panel cut-out.
2. Carefully remove the center section of the panel gasket (provided with the unit) and discard. Slide the panel gasket over the rear of the unit to the back of the bezel.
3. Slide the mounting plate over the rear of the unit to the back of the bezel.
4. Insert the unit with mounting plate into the panel cut-out from the front. Slide the adapter plate over the rear of the unit. The protrusion on the adapter plate is designed to fit into the existing 1/8 DIN panel cut-out to properly position the unit.
5. Refer to the installation section of the manual, supplied with the unit, to complete the installation.

ORDERING INFORMATION

<table>
<thead>
<tr>
<th>MODEL NO.</th>
<th>DESCRIPTION</th>
<th>PART NUMBER</th>
</tr>
</thead>
<tbody>
<tr>
<td>PMK6</td>
<td>Panel Mount Adapter Kit (1/8 DIN to 1/16 DIN)</td>
<td>PMK60000</td>
</tr>
</tbody>
</table>

DIMENSIONS In inches (mm)

MOUNTING PLATE

ADAPTER PLATE

EXISTING PANEL CUT-OUT
1/8 DIN
3.62" (92mm) X 1.77" (45mm)

PANEL LATCH (SUPPLIED W/UNIT)

ADAPTER GASKET (SUPPLIED W/ADAPTER KIT)

MOUNTING PLATE (SUPPLIED W/ADAPTER KIT)

T48
The panel mount adapter kit is used to mount CUB5 units into existing 1/8 DIN panel cut-outs. The kit includes two black painted durable steel mounting plates and a sponge rubber gasket. The Adapter Kit, when used with a unit which has NEMA 4/IP65 specifications, will meet NEMA 4/IP65 requirements when properly installed. Red Lion Controls CUB5 products include Counters, Timers, Temperature, Process and Rate units.

**DIMENSIONS In inches (mm)**

**MOUNTING PLATE**

<table>
<thead>
<tr>
<th>Measurement</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.60 (116.8)</td>
<td>2.69 (68.3)</td>
</tr>
<tr>
<td>2.50 (63.5)</td>
<td>1.31 (33.3)</td>
</tr>
<tr>
<td>0.09 (2.3)</td>
<td></td>
</tr>
</tbody>
</table>

**ADAPTER PLATE**

<table>
<thead>
<tr>
<th>Measurement</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.50 (114.3)</td>
<td>2.69 (68.3)</td>
</tr>
<tr>
<td>1.30 (33.0)</td>
<td>3.50 (88.9)</td>
</tr>
<tr>
<td>0.04 (1.01)</td>
<td></td>
</tr>
</tbody>
</table>

**INSTALLATION**

**TYPICAL HORIZONTAL MOUNT INSTALLATION**

1. Remove the paper backing from the adhesive side of the adapter gasket (*included with adapter kit*) and carefully apply the gasket to the front of the existing panel cut-out.

2. Carefully remove the center section of the panel gasket (provided with the unit) and discard. Slide the panel gasket over the rear of the unit to the back of the bezel.

3. Slide the mounting plate over the rear of the unit to the back of the unit bezel.

4. Insert the unit with mounting plate into the panel cut-out from the front. Slide the adapter plate over the rear of the unit. The protrusion on the adapter plate is designed to fit into the existing 1/8 DIN panel cut-out to properly position the unit.

5. Refer to the installation section of the manual, supplied with the unit, to complete the installation.

**ORDERING INFORMATION**

<table>
<thead>
<tr>
<th>MODEL NO.</th>
<th>DESCRIPTION</th>
<th>PART NUMBER</th>
</tr>
</thead>
<tbody>
<tr>
<td>PMK6A</td>
<td>Panel Mount Adapter Kit (1/8 DIN to CUB5)</td>
<td>PMK6A000</td>
</tr>
</tbody>
</table>
**MODEL PMK8 - PANEL MOUNT ADAPTER KIT FOR PAX TO GEMINI CUT-OUT**

The PMK8 panel mount adapter kit is used to mount a PAX meter into an existing GEMINI panel cut-out. The kit includes two durable steel mounting plates painted black and a neoprene gasket. The Adapter Kit, when used with a meter which has NEMA 4/IP65 specifications, will meet NEMA 4/IP65 requirements when properly installed.

**ORDERING INFORMATION**

<table>
<thead>
<tr>
<th>MODEL NO.</th>
<th>DESCRIPTION</th>
<th>PART NUMBER</th>
</tr>
</thead>
<tbody>
<tr>
<td>PMK8</td>
<td>Panel Mount Adapter Kit (PAX to Gemini)</td>
<td>PMK80000</td>
</tr>
</tbody>
</table>

**PMK8 DIMENSIONS  In inches (mm)**

<table>
<thead>
<tr>
<th>MOUNTING PLATE</th>
<th>ADAPTER PLATE</th>
</tr>
</thead>
<tbody>
<tr>
<td>5.75 (146)</td>
<td>4.96 (126)</td>
</tr>
<tr>
<td>3.00 (76.2)</td>
<td>3.25 (82.6)</td>
</tr>
<tr>
<td>1.77 (45)</td>
<td>1.77 (45)</td>
</tr>
<tr>
<td>3.62 (91.9)</td>
<td>3.62 (91.9)</td>
</tr>
<tr>
<td>0.075 (1.90)</td>
<td>.05 (1.5)</td>
</tr>
<tr>
<td>.09 (2.3)</td>
<td>.09 (2.3)</td>
</tr>
</tbody>
</table>

**PMK8 INSTALLATION**

1. Apply the panel gasket (*provided with the meter*) over the PAX meter.
2. Insert the PAX meter through the mounting plate.
3. Apply the panel gasket (*provided with the adapter kit*) over the PAX meter behind the mounting plate.
4. Insert the PAX meter with mounting plate and gaskets into the front of the existing Gemini hole cut-out. Slide the adapter plate over the rear of the PAX meter.
5. Slide the panel latch (*provided with the meter*) over the rear of the PAX meter and tighten the screws.
The Gemini Series panel adapter kit permits the mounting of the Gemini unit to an existing 68 mm x 138 mm DIN standard panel cut-out. The kit consists of two metal adapter plates coated with a durable flat black polyurethane finish, and a neoprene gasket, which provides a sealed front panel that meets NEMA 4/IP65 specifications when properly installed.

**DIMENSIONS In inches (mm)**

- An overall panel area of 3” x 6” is required for proper mounting.

**INSTALLATION**

1. Remove the backing from the adhesive side of the adapter gasket (included with adapter kit) and carefully stick the gasket to the front of the existing panel cut-out.
2. Apply the standard panel mount gasket (provided with the Gemini unit) to one of the adapter plates and slide the plate over the Gemini unit. (Gasket side must be facing the bezel.)
3. Insert the Gemini unit into the panel cut-out from the front and slide the remaining adapter plate over the Gemini unit from the rear.
4. Install the two mounting clips (provided with the Gemini unit) as per the instructions in the Gemini manual. Install the screws into the mounting clips and tighten them evenly to apply uniform compression and to provide a water-tight seal.

**CAUTION:** Only minimum pressure is required to seal the panel. Do **NOT** overtighten the mounting screws.

**ORDERING INFORMATION**

<table>
<thead>
<tr>
<th>MODEL NO.</th>
<th>DESCRIPTION</th>
<th>PART NUMBER</th>
</tr>
</thead>
<tbody>
<tr>
<td>PMKG1</td>
<td>3-PIECE KIT permits mounting to existing 2.67” x 5.43” (68 mm x 138 mm) Panel cut-out, O.A. DIM. 3” x 6” (76.2 mm x 152.4 mm)</td>
<td>PMKG1000</td>
</tr>
</tbody>
</table>

1-717-767-6511

Courtesy of Steven Engineering, Inc.-230 Ryan Way, South San Francisco, CA 94080-6370-Main Office: (650) 588-9200-Outside Local Area: (800) 258-9200-www.stevenengineering.com
1/8 DIN PANEL ADAPTER KIT
FOR DT3A, DT3D, SCT, & SCP PANEL CUT-OUTS

The 1/8 DIN panel adapter kit permits the mounting of the PAX and Apollo units into an existing 1.8" (45.7 mm) x 3.88" (98.5 mm) (DT3A, DT3D, SCT, & SCP) panel cut-out. The kit consists of two metal adapter plates coated with a durable flat black polyurethane finish, and a neoprene gasket, which provides a sealed front panel that meets NEMA 4/IP65 specifications when properly installed.

**DIMENSIONS In Inches (mm)**

NOTE:
An overall panel area of 2.25" (57.1 mm) x 4.63" (117.6 mm) is required for proper mounting.

---

**INSTALLATION**

1. Remove the backing from the adhesive side of the adapter gasket (included with adapter kit) and carefully stick the gasket to the front of the existing panel cut-out.

2. Place the standard panel mount gasket (provided with the unit) over the unit. Then slide one of the plates over the unit. If the gasket has adhesive, apply the gasket to the plate, then slide the plate over the unit. (Gasket must be facing the bezel.)

3. Insert the unit into the panel cut-out from the front and slide the remaining adapter plate over the unit from the rear.

4. Install the mounting clip(s) as per the unit instructions. Tighten the mounting screws evenly to apply uniform compression and to provide a water-tight seal.

**CAUTION:** Only minimum pressure is required to seal the panel. Do NOT overtighten the mounting screws.

---

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<table>
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<tr>
<th>MODEL NO.</th>
<th>DESCRIPTION</th>
<th>PART NUMBER</th>
</tr>
</thead>
<tbody>
<tr>
<td>PMKA1</td>
<td>3-PIECE KIT permits mounting to existing 1.8&quot; x 3.88&quot; (45.7 x 98.4 mm) Panel cut-out, O.A. DIM. 2.25&quot; x 4.63&quot; (57.1 x 117.6 mm)</td>
<td>PMKA1000</td>
</tr>
</tbody>
</table>
**INSTALLATION FOR CUB CONTROLLER PANELMOUNT KITS**

Three panelmount kits for the CUB Controller are available to replace most existing miniature presettable counters on the market today. Kits come complete with adapter plates coated with a durable flat black polyurethane finish, mounting hardware, and gaskets to provide a complete sealed unit that meets NEMA 4/IP65 specifications when properly installed.

**PMKCC1 & PMKCC2**

These panelmount kits adapt the CUB Controller to either a 50 mm x 50 mm or a 68 mm x 68 mm panel cut-out. The kit consists of two metal panel adaptors, one neoprene gasket and 2 3-48 x 1/2” screws. The adapter plates and gasket are pinched between the front bezel of the counter and the mounting clips (provided with the controller accessory bag). The 1/2” long screws may be necessary for thicker panel installations.

Note: If room permits, install signal connector after unit is mounted. If there is not enough room, pull the wires through before installing as described below:

1. Pull signal connector through the following items in order:
   a) One panel adapter plate.
   b) Through existing panel opening.
2. Slide the following items onto the counter.
   a) Panel gasket
   b) Adapter plate
   c) Adapter gasket
3. Install connector in the Cub Controller. Ensure connector is in proper orientation i.e. lockslots visible when viewed from below the case.
4. Slide counter through panel cut-out from the front, and center in the panel opening.
5. Install mounting clips (one on either side) with the screws provided. Tighten the screws moderately to “pinch” the gaskets and panels between the front bezel and the mounting clips. (Mounting clips are provided in accessory bag.)

**DIMENSIONS In inches (mm)**

```
P MKCC1  PMKCC2  PMKCC3
         1.770 (45)  1.770 (45)  1.770 (45)
         1.770 (45)  1.770 (45)  1.770 (45)
         2.270 (57.6)  3.000 (76)  2.360 (60)
       .250 (6.3)  .250 (6.3)  .250 (6.3)
      2.270 (57.6)  2.270 (57.6)  2.270 (57.6)
```

1-717-767-6511

1001

Courtesy of Steven Engineering, Inc.-230 Ryan Way, South San Francisco, CA 94080-6370-Main Office: (650) 588-9200-Outside Local Area: (800) 258-9200-www.stevenengineering.com
For mounting proceed as follows:

1. Slide panel gasket over back of counter. (*Gasket is supplied in accessory bag with counter.*)
2. Slide counter onto adapter plate.
3. Slide adapter gasket onto counter.
4. Attach counter to adapter plate with two mounting clips and screws. (*Both mounting clips are supplied in accessory bag with counter.*)
5. Install connector in the Cub Controller. Ensure connector is in proper orientation i.e. lockslots visible when viewed from below the case.
6. Place complete assembly over existing cut-out, lining up the adapter plate mounting holes with existing holes.
7. Use two mounting screws and nuts provided with Panel Adapter Kit to secure panel to existing cut-out.

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</tr>
</thead>
<tbody>
<tr>
<td>PMKCC1</td>
<td>3-PIECE KIT permits mounting in existing 1.97” X 1.97” (50 mm x 50 mm) panel cut-outs O.A. 2.27” x 2.27” (57.6 mm x 57.6 mm)</td>
<td>PMKCC100</td>
</tr>
<tr>
<td>PMKCC2</td>
<td>3-PIECE KIT permits mounting in existing 2.68” x 2.68” (68 mm x 75 mm) socket box panel cut-outs, (72 mm x 72 mm DIN bezel opening) O.A. 3” x 3” (76 mm x 76 mm)</td>
<td>PMKCC200</td>
</tr>
<tr>
<td>PMKCC3</td>
<td>2-PIECE KIT permits mounting for existing 2.36” x 2.95” (60 mm x 75 mm) socket box panel cut-outs O.A. 2.36” x 2.96” (60 mm x 75 mm) Hole Centers 2.48” (63 mm)</td>
<td>PMKCC300</td>
</tr>
</tbody>
</table>

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