Pow-R-Command™ Analog Expansion Module (PRCEAEM) is used when the required number of universal inputs or analog outputs exceeds the PRCE master controller’s maximum number of eight. Each PRCEAEM includes eight universal inputs and eight 0–10 Vdc analog outputs. Universal inputs are used to connect 0–10 Vdc analog devices, such as photosensors. Universal inputs can also accept two-wire maintained dry-contact devices. Analog outputs are used to control lighting fixtures equipped with 0–10 Vdc dimming control circuitry. There is a maximum of 80 mA sink or source current per analog output channel.

Features and benefits
The PRCEAEM is connected to the PRCE controller MLAN network in a daisy-chain network architecture using Belden 3105A shielded twisted pair communications cable. It can be mounted near the controller or remotely to reduce field wiring.

Up to a maximum of seven PRCEAEMs can be connected to PRC1500E/2000E controllers. PRC1000E controller can accept a single PRCEAEM. Maximum overall network length of 4,000 ft.

PRCEAEM configuration requires PRC Lighting Optimization Software. PRCEAEM I/O status is available through the PRCE controller web pages.

The PRCEAEM is provided in a factory-assembled NEMA® 1 enclosure with 120 Vac power supply.

Specifications
- **Eight universal inputs**
  - Connects to 0–10 Vdc analog photosensors or two-wire maintained dry-contact devices
  - 18 AWG 500 ft maximum distance
- **Eight analog outputs**
  - Used to control lighting fixtures equipped with 0–10 Vdc dimming control circuitry
  - Maximum of 80 mA sink or source current
  - 18 AWG 1,000 ft maximum distance
- **MLAN RS-485 network**
  - Belden 3105A shielded twisted pair in a daisy-chain network architecture
  - Maximum 4,000 ft overall network length from PRCE controller
- **Controller compatibility**
  - Maximum of seven PRCEAEM connected to the PRCE controller MLAN network (PRC1000E supports a single PRCEAEM)
  - Configured using PRC Lighting Optimization Software (PRCLOS)
  - I/O status available through PRCE controller web pages
  - Available in NEMA 1 enclosure with 120 Vac power supply (see table on the following page)
  - Compatible with PRC1000E/1500E/2000E controllers
  - Not compatible with PRC750E controller
Expansion Module Addressing

PRCE controller

MLAN—Belden 3105A or equivalent. RS-485 120 ohm shielded twisted pair, daisy-chained

120 ohm EOL resistor required at the last PRCEAEM. Two additional PRCEAEM modules. Seven modules maximum per PRCE controller.

PRCE Analog Expansion Module MLAN network connection

PRCE Analog Expansion Module I/O connections

Pow-R-Command Analog Expansion Module (PRCEAEM) selection

<table>
<thead>
<tr>
<th>Description</th>
<th>Universal inputs</th>
<th>Analog outputs</th>
<th>Catalog number</th>
</tr>
</thead>
<tbody>
<tr>
<td>One Analog Expansion Module, NEMA 1 enclosure with 120 Vac power supply</td>
<td>8</td>
<td>8</td>
<td>PRCEAEM1E</td>
</tr>
<tr>
<td>Two Analog Expansion Modules, NEMA 1 enclosure with 120 Vac power supply</td>
<td>16</td>
<td>16</td>
<td>PRCEAEM2E</td>
</tr>
<tr>
<td>Three Analog Expansion Modules, NEMA 1 enclosure with 120 Vac power supply</td>
<td>24</td>
<td>24</td>
<td>PRCEAEM3E</td>
</tr>
<tr>
<td>Four Analog Expansion Modules, NEMA 1 enclosure with 120 Vac power supply</td>
<td>32</td>
<td>32</td>
<td>PRCEAEM4E</td>
</tr>
</tbody>
</table>

Notes: Consult factory for non-standard configurations and enclosures. Refer to PRCEAEM-Input/Output standard drawing, PRCE controller MLAN drawing and PRCE CAG for more information.

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