

# **i48e Dimmer Rack**





# **FEATURES**

- Compact half-rack houses up to 48 individual dimmers
- Standard 500 microsecond filter chokes
- Optional redundant Control Module provides seamless backup for each rack
- All rack configuration data is stored in the rack electronics - changing control modules does not require any reprogramming
- Optional Hand Held Terminal provides feedback and control at each rack or remotely; the Terminal's display is visible through the rack door
- Stores 100 timed Backup Looks
- Stores 12 Looks for house or stage
- Stacked design provides fresh cooling air to each module, allows full frontal access to interior wiring and terminations
- Simple rack-to-rack bussing
- Built-in Panic Function for each dimmer
- 120V Units, UL Listed and C-UL Listed
- Compatible with Leviton Dimension® Controllers

| DIMENSIONAL DATA - IN. [CM] LBS. [KG] |               |
|---------------------------------------|---------------|
| Width                                 | 16.5 [42.0]   |
| Depth                                 | 24.0 [61.0]   |
| Height                                | 50.0 [127.0]  |
| Weight (w/dimmers)                    | 340.0 [154.0] |

# **SPECIFICATIONS**

• The i48e dimmer rack contains 24 dimmer module slots for housing up to 48 dimmers. The rack offers an option for a redundant control module that provides seamless backup in case of the main control module's failure or removal from the rack.

# **MECHANICAL**

• The rack is built from extruded aluminum structural members with removable side panels of code gauge steel, measuring 50" high x 16.5" wide x 24" deep. All exterior surfaces are finished in textured black polyurethane finish. Side, rear, top and bottom panels can be easily removed without dismantling the rack. Since the racks require no rear or side access, racks can be mounted back-to-back or side-to-side. The front of the rack is completely open, allowing clear installer access to all line, load and control terminations. Dedicated wire guides are mounted internally to aid in installation of load circuit wiring. Each load termination accepts up to a #2 AWG wire.

- The cooling fan and its control unit are mounted in removable modular housing for easy cleaning and maintenance. Each dimmer receives fresh air through the door-mounted electrostatic filter. Each rack has a locking door that has an optional window for a Hand Held Terminal display.
- All dimmers are housed in removable modules made
  of die-cast aluminum. Each module contains one
  or two circuit breakers, a solid-state SCR switching
  device (SSR), a control PCB, and two filter chokes.
  All electrical contacts feature self-aligning floating
  connectors to insure precise alignment of all connections. Modules are keyed so that a module of
  higher ampacity cannot be inserted into a slot that
  is wired for a lower ampacity dimmer. All dimmer
  modules can be inserted and removed without the
  use of any tools.

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#### **ELECTRICAL**

• The i Series e rack is designed to operate on voltages ranging from 90-135VAC (120V nominal) or 187-265VAC (230V nominal) at 47-63 Hz. Rack can be ordered for use with four-wire three-phase, three-wire single-phase or two-wire single-phase power. Simple rack-to-rack bussing eliminates the need to run separate line feeds to each rack. The 120V i48e rack is UL Listed and C-UL Listed (for Canadian applications) with a short-circuit current rating of 100,000 AIC providing listed dimmer modules are installed and the racks are not modified. Optional current - limiting fault-current fuses (Amp-Traps) are available for other 100,000 AIC applications. In systems that require a ground wire per load circuit, an optional ground bus can be installed inside the rack. All bussing, and all line and load terminals are copper.

#### **CONTROL MODULES**

- Each rack contains an electronic backplane, with all control wiring connections on removable screw terminals for easy control wiring. The backplane also retains all rack configuration and Backup Looks in nonvolatile memory, so that when any new control module is inserted, it automatically comes on-line fully functional within ten seconds without requiring programming by the user.
- Each rack requires a single control module that connects to the rack's electronic backplane. Control modules can be inserted and removed without the use of any tools. The backup module is on-line automatically in case of main control module failure.
- Each control module has three LEDs to indicate the presence of voltage on each power phase. The control module stores 100 timed Backup Looks and 12 Looks for house or stage. The 120V control module is UL Listed and C-UL Listed.

#### **FUNCTIONAL**

- The control module has an opto-isolated DMX512 input.
   Control module supports analog controls for storage and playback of 12 Looks of 512 channels each.
- The Hand Held Terminal also provides access to configuration and feedback information.
- Each dimmer can be programmed for the following operation parameters: Minimum and maximum level, non-dim operation and threshold level.
- Feedback information appears through the LEDs of each dimmer module or on the Hand Held Terminal plugged into the control module. Feedback information for each dimmer includes the following elements: Active load, Overtemperature.
- Each rack comes with software-selectable Panic operation for each dimmer. Terminals for dry contact closures are provided to initiate a Panic condition, which drives all selected dimmers to full without affecting any other control settings.

# **HAND HELD TERMINAL**

• Each rack system may have an optional Hand Held Terminal installed so that the LCD screen remains visible through the rack door. Rack configuration, direct control of dimmers and Backup Looks, and dimmer feedback can all be achieved through the Hand Held Terminal. In multi rack installations, one Hand Held Terminal may access and edit dimmers system wide.

| CAT. NO.   | DESCRIPTION  |  |
|--|--|--|
| IER48-130  | i Series e, 48 circut rack, 120V 3-phase, standard configuration with hand held terminal mount                 |  |
| IER48-430  | i Series e, 48 circut rack, 230V 3-phase, 2.5KW, sequential or phase balanced with hand held terminal mount    |  |
| IER48-43B  | i Series e, 48 circut rack, 230V 3-phase, configured for dual 5KW dimmer module, with hand held terminal mount |  |
| ACCESSORIES  |  |  |
| loRg6-GBK  | Ground Bus Kit for g6 circuit racks  |  |
| loR48-GBK  | Ground Bus Kit for 48 circuit racks  |  |
| loR24-GBK  | Ground Bus Kit for 24 circuit racks  |  |
| TAHHR-oIE  | Hand Held Terminal   |  |
| For dimmer & air flow module part numbers, please reference the dimmer module data sheet |  |  |

| LEVITON SPECIFICATION SUBMITTAL |                  |
|---------------------------------|------------------|
| JOB NAME:                       | CATALOG NUMBERS: |
| JOB NUMBER:                     |                  |

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