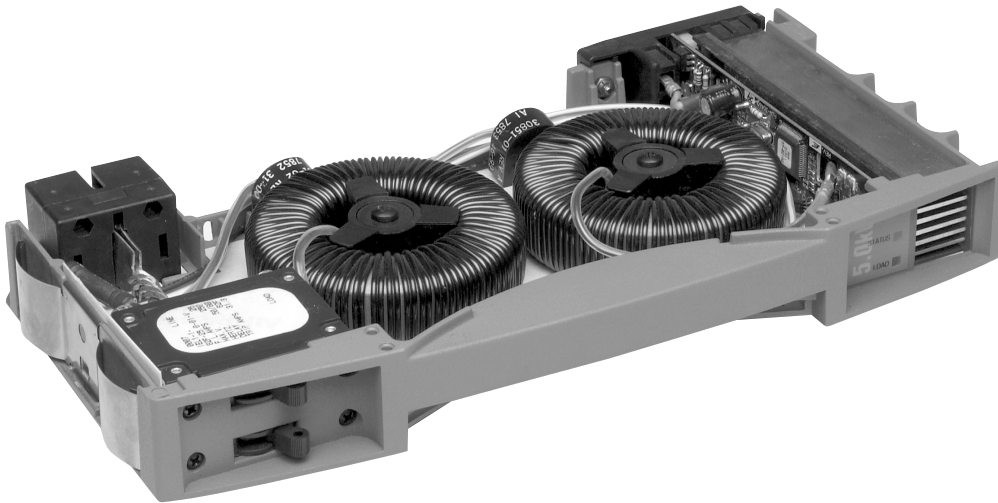


i Series Dimmer Modules



*i*series®

FEATURES

- High performance dimming with advanced feedback functions
- Truly “smart” dimmers: each dimmer module contains its own electronics to control its own processes
- Localized power regulation gives smooth, consistent power output despite fluctuations in line power input
- LEDs on each module offer immediate local feedback at the rack
- Control signal is optically isolated to 4,000 Volts
- Standard 500 µsec and high-performance 800 µsec rise time models available
- Rugged mechanical design for reliability
- “Floating” load and line connectors allow for smooth insertion and removal of the module, and ensures the integrity of all power and control contacts
- User-serviceable components
- 120V Units, UL listed and C-UL listed

SPECIFICATIONS

- The dimmer module is designed for superior reliability in the most demanding of operation conditions. Each module is equipped with its own high-speed micro-processor to monitor its active power conditions, control its own firing modulation, and regulate its output voltage(s). The result is an unmatched capacity to tolerate fluctuations in voltage and frequency while maintaining output integrity. Each dimmer module also monitors its temperature and active voltage and current output and reports this information to the control module. Each dimmer module has a dedicated optically isolated control signal line from the control module - the failure of one module cannot affect the operation of any other dimmer module. This “distributed electronics” system allows the control module to handle higher level tasks, such as pile-on and remapping of dimmer data, and storage and recall of Backup Looks.

DIMENSIONAL DATA - IN. [CM]			
	Single/Dual	Dual Constant	Double High
Width	12.5 [31.8]	12.5 [31.8]	12.5 [31.8]
Depth	6.5 [16.5]	6.5 [16.5]	6.5 [16.5]
Height	1.5 [3.8]	1.5 [3.8]	3.0 [7.6]

INDICATORS		
Status LED	Load LED	Indicates
Green, steady	Steady or Off	Normal operation or open circuit
	Flashing	Low or high load alarm
Red, steady	Steady or Off	Panic condition
	Flashing	Circuit breaker tripped
Red, flashing	Steady or Off	Overtemp warning
	Flashing	Overtemp shutdown

MECHANICAL

- The 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 high-speed microprocessor PCB, and two filter chokes. The face of the module has a handle, the circuit breaker switches, air vents, and labeled LEDs for local feedback. The left side of the module has a wide section of spring steel to insure a proper fit for each module in the rack. 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.

Leviton Mfg. Co., Inc. Lighting Management Systems

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PRODUCT DATA



ELECTRICAL

- The i Series dimmer module is designed to operate on voltages ranging from 90-140VAC (120V nominal) or 198-264VAC (230V nominal) at 45-65 Hz. The dimmer module electronics' firing signal is optically isolated to 4,000 Volts from the power semi-conductors. Additionally, the control signal from the control module is optically isolated to 4,000 Volts from the dimmer module electronics. The high-speed microprocessor gives the dimmer the ability to break the zero-to-full dimmer curve into over 5,000 discrete steps.
- The i Series dimmer module is capable of withstanding the following adverse conditions without any interruption of operation:
 - a complete dropout of line voltage for up to 10 milli-seconds
 - a line surge or sag of 25% of nominal operating voltage for at least 500 milli-seconds
 - transient voltage up to 2 1/2 times the nominal line voltage
- The module can also maintain proper output voltage regulation with +/- 1 Volt for line voltage changes of up to 10 Volts per second, and for line frequency changes of up to 1 Hertz per second.

FUNCTIONAL

- Each i Series dimmer can be programmed for the following operation parameters:
 - line voltage regulation speed
 - control response speed
 - minimum and maximum level
 - Leviton's patented Electronic Noise Reduction feature (on/off)
 - non-dim operation and threshold level

- cable resistance compensation
- one of five user programmable output curves (profiles)
- recorded load level
- over-temperature warning level
- When a dimmer is set as a non-dim, it passes a full sine wave unregulated from the input voltage.
- Each dimmer tracks operating conditions and provides feedback to the control module, which transmits the information to the user interfaces and/or the LEDs on the face of the dimmer module. Real-time feedback information for each dimmer includes the following elements:
 - active load in Watts
 - active voltage
 - error conditions
 - deviation from recorded load
 - open circuit (no load)
 - tripped circuit breaker
 - over-temperature warning
 - over-temperature shutdown
 - Panic condition
 - incorrect module for selected rack position
- Modules are available in standard (500µ) or high (800µ) rise times. Oscillographic evidence of rise time data is available upon request.
- Airflow modules are required in unused slots in order to maintain proper rack ventilation.
- 120 V units are UL listed and C-UL listed (for Canadian applications)

CAT. NO.	DESCRIPTION
120V DIMMER MODULES	
IAD25-120	i Series 2.4kW dual dimmer module, 120V, 500us
IAD25-115	i Series 1.8kW dual dimmer module, 120V, 500us
IAD15-150	i Series 6.0kW single dimmer module, 120V, 500us
IAD18-120	i Series 1.8kW single dimmer module, 120V, 800us
IAD18-120	i Series 2.4kW single dimmer module, 120V, 800us
IAD18-150	i Series 6.0kW double high dimmer module, 120V, 800us
IAC20-120	i Series 2.4kW dual constant module, 120V, 500us
IAC20-115	i Series 1.8kW dual constant module, 120V, 500us
240V MODULES	
IAD18-220	i Series 5.0kW single dimmer module, 240V, 500us
IAD18-210	i Series 2.5kW single dimmer module, 240V, 800us
IAD18-220	i Series 5.0kW double high dimmer module, 240V, 800us
IAD23-220	i Series 5.0kW dual dimmer module, 240V, 350us
IAD28-210	i Series 2.5kW dual dimmer module, 240V, 500us
ACCESSORIES	
IAA20-000	i Series airflow module

This product may be covered by one or more of the following patents: US 5,668,537, US 6,020,825, US 6,930,455, EP 0,728,275.

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

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