

# INDIGO-CLEAN™ M4SEDIC SERIES

## Patented Continuous Environmental Disinfection System

### Switchable White and Indigo Disinfection LED

#### PRODUCT FEATURES:

- » Two operational modes: White Disinfection Mode & Indigo Disinfection Mode
- » High performance LED arrays provide uniform lens appearance
- » Diffused high-efficiency lens for reduced glare
- » Symmetric optical distribution
- » Universal housing accommodates either flange (drywall) or grid ceiling applications
- » One-piece sealed housing; smooth exterior doorframe and lens for infection control and simplified cleaning protocols
- » Conducted emissions controlled as per MIL-STD-461G



PROJECT INFORMATION	
Job Name	_____
Fixture Type	_____
Catalog Number	_____
Approved by	_____

#### SPECIFICATIONS

**HOUSING:** 20-gauge CRS. Hole-free, one-piece, seam-welded construction. Integral aluminum heatsink for thermal dissipation. 18-gauge housing flange with mitered and welded corners. Gloss white TGIC polyester powder-coat finish with 5-stage pre-treatment. Antimicrobial finish on all exposed painted surfaces of installed luminaire.

**DOORFRAME:** 18-gauge CRS. One-piece inset-style construction with welded corners. Gloss white TGIC polyester powder coat finish with 5-stage pre-treatment. Doorframe secured to housing with stainless steel aircraft cables and captive, flush-mounted Phillips-head fasteners. Antimicrobial finish standard on all exposed painted surfaces of the installed luminaire. One-piece, closed-cell silicone gasket seals doorframe to housing.

**OPTICS:** Symmetric optic includes diffused, impact-resistant acrylic lens.

**ELECTRICAL:** Serviceable composite-bodied mid-power white LED array and high-power 405 nm indigo LED array. Available 3700K and 4300K color temperatures with maximum 3-step MacAdam variation allowance. Minimum 80 CRI standard with optional minimum 90 CRI available. 120/277VAC, 50/60Hz electrical input with serviceable high power factor electronic, constant-current drivers (<10% THD, >0.90 PF). Minimum 85% driver efficiency. Standard 0-10V dimming with 1-100% range with dim-to-dark capabilities in White Disinfection Mode. 700 µA maximum source current. Two operational modes: White Disinfection Mode is a white LED array for ambient lighting plus simultaneous low-power 405nm indigo array for low-level continuous environmental disinfection. Indigo Disinfection Mode is a high power 405nm Indigo LED array for continuous environmental disinfection. Operational mode determined via internal low-voltage device based upon input provided by external IC100 room control system. EMC meets or exceeds MIL STD 461G conducted requirements.

**INSTALLATION:** Non-IC recessed ceiling mounting into grid and flange application types. Flange installation utilizes included adjustable swing-out mounting brackets. Grid installation suitable for 1" and 1.5" T-bar ceilings. Universal installation into flange (drywall) or grid ceiling applications.

**PHOTOMETRICS:** Photometry tested to the IESNA LM-79-08 standard. For additional photometric data, please contact Indigo-Clean@Kenall.com.

**PATENT:** Indigo-Clean products and technology covered by U.S. Patent No. US 9,039,966 and US 8,398,264. Product may also be covered by patents found at [www.kenall.com/patents](http://www.kenall.com/patents). Other patents pending.

**WARRANTY:** Limited five (5) year Kenall LED warranty.

**LISTINGS:** Luminaire is certified to UL standards by Intertek Testing Laboratories for Wet Location. UL certified IP65 per IEC 60598. NSF2 Splash/Non-Food Zone. Meets FED-STD-209E/Class 1 (ISO 3) Cleanrooms. Conducted emissions controlled as per MIL-STD-461G. CCEA Approved.



#### ORDERING INFORMATION (Ex: M4SEDIC-24-150I/100L-43K8-DCC-277-2F-2H-SYM)

Model	Size	Lamp Power	Lamp Color	Driver	Input Voltage	Doorframe	Housing	Optics	Options
<b>M4SEDIC</b>				<b>DCC</b>				<b>SYM</b>	
<b>Size</b>				<b>Driver Type</b>				<b>Optics</b>	
<b>14</b>	1'x4' Nominal			<b>DCC</b> Dimming Constant Current				<b>SYM</b> Symmetric, Diffused DR Acrylic	
<b>22</b>	2'x2' Nominal								
<b>24</b>	2'x4' Nominal			<b>Input Voltage</b>				<b>Options</b>	
				<b>120</b> 120VAC				<b>LEL</b> Emergency Integral Battery Pack	
				<b>277</b> 277VAC				<b>FS</b> Fuse & Holder	
<b>Lamp Power</b>				<b>Doorframe Options</b>				<b>RM*</b> Continuous Row Mounting	
<b>1'x4'</b>				<b>2F</b> 18-Ga CRS Painted Antimicrobial (STD)					
<b>75I/50L</b>	75 Watt Indigo/50 Watt White LED			<b>AF</b> Anodized Aluminum					
				<b>PAF</b> Painted Antimicrobial Fabricated Aluminum					
<b>2'x2'</b>				<b>5F</b> 20-Ga Type 304 SS Brushed					
<b>75I/50L</b>	75 Watt Indigo/50 Watt White LED			<b>Housing Options</b>					
				<b>2H</b> 20-Ga CRS; Painted Antimicrobial (STD)					
<b>2'x4'</b>				<b>5H</b> 20-Ga Type 304 SS					
<b>150I/100L</b>	150 Watt Indigo/100 Watt White LED			<b>PAH</b> .050" Painted Antimicrobial Aluminum					
<b>Lamp Color</b>									
<b>37K8</b>	3700K, 80 CRI								
<b>37K9</b>	3700K, 90 CRI								
<b>43K8</b>	4300K, 80 CRI								
<b>43K9</b>	4300K, 90 CRI								

\* Only available when installing in drywall ceilings (flange mount)



[www.kenall.com](http://www.kenall.com)

P: 800-4-Kenall

F: 262-891-9701

10200 55th Street Kenosha, Wisconsin 53144

When you see this image, you will know the Kenall product shown or described is designed and manufactured in the USA with components purchased from US suppliers, and meets the Buy American requirements under the ARRA. Kenall has not determined the origin of its domestically purchased components or the subcomponents thereof. May be covered by patents found at [www.kenall.com/patents](http://www.kenall.com/patents). Content of specification sheets is subject to change; please consult [www.kenall.com](http://www.kenall.com) for current product details. © 2018 Kenall Mfg. Co. All rights reserved.

M4SEDIC-112918

# INDIGO-CLEAN™ M4SEDIC Series

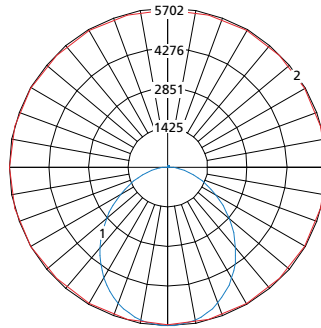
## Patented Continuous Environmental Disinfection System

### Switchable White and Indigo Disinfection LED

Size	Mode	Lamp Code	Delivered Lumens (lm)	Input Power (W)	Color Rendering		TM-30 Color Quality		Est. L70 LED Life (Hrs)
					R <sub>a</sub>	R <sub>g</sub>	R <sub>f</sub>	R <sub>g</sub>	
1'x4'	White Disinfection Mode	75I/50L-37K8	6,411	74	83	21	77	101	125,000
		75I/50L-37K9	5,438	72	93	73	86	105	
		75I/50L-43K8	6,773	80	84	21	79	99	
		75I/50L-43K9	5,585	75	92	83	86	105	
	Indigo Disinfection Mode	All	-	83	-	-	-	-	50,000
2'x2'	White Disinfection Mode	75I/50L-37K8	6,245	74	83	21	77	101	125,000
		75I/50L-37K9	5,297	72	93	73	86	105	
		75I/50L-43K8	6,597	80	84	21	79	99	
		75I/50L-43K9	5,440	75	92	83	86	105	
	Indigo Disinfection Mode	All	-	83	-	-	-	-	50,000
2'x4'	White Disinfection Mode	150I/100L-37K8	13,320	148	83	21	77	101	125,000
		150I/100L-37K9	11,299	143	93	73	86	105	
		150I/100L-43K8	14,072	160	84	21	79	99	
		150I/100L-43K9	11,603	150	92	83	86	105	
	Indigo Disinfection Mode	All	-	165	-	-	-	-	50,000

Information subject to change without notice. TM-30 Color Vector Graphic available upon request. Visit [www.kenall.com](http://www.kenall.com) for .ies files and additional information.

Model: M4SEDIC-24-150I/100L-43K8-DCC-120-2F-2H-SYM

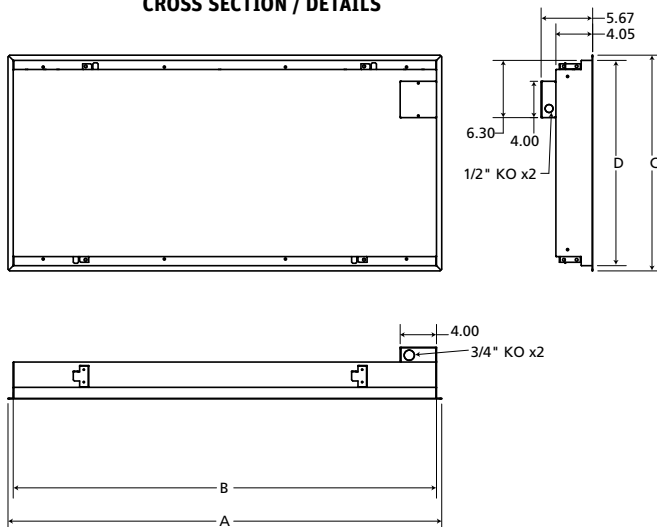


Maximum Candela = 5702 Located At Horizontal Angle = 0, Vertical Angle = 2.5

1 - Vertical Plane Through Horizontal Angles (0-180) (Through Max. Cd.)  
 2 - Horizontal Cone Through Vertical Angle (2.5) (Through Max. Cd.)

### DIMENSIONAL DATA

#### CROSS SECTION / DETAILS



DIMENSIONAL DATA (IN INCHES)				
	A	B	C	D
<b>1x4</b>	47.75	46.60	11.75	10.60
Recommended Ceiling Cut-Out 10.85 x 46.85				
<b>2x2</b>	23.61	22.60	23.61	22.60
Recommended Ceiling Cut-Out 22.85 x 22.85				
<b>2x4</b>	47.75	46.60	23.75	22.60
Recommended Ceiling Cut-Out 22.85 x 46.85				



[www.kenall.com](http://www.kenall.com)

P: 800-4-Kenall

F: 262-891-9701

10200 55th Street Kenosha, Wisconsin 53144

When you see this image, you will know the Kenall product shown or described is designed and manufactured in the USA with components purchased from US suppliers, and meets the Buy American requirements under the ARRA. Kenall has not determined the origin of its domestically purchased components or the subcomponents thereof. May be covered by patents found at [www.kenall.com/patents](http://www.kenall.com/patents). Content of specification sheets is subject to change; please consult [www.kenall.com](http://www.kenall.com) for current product details. © 2018 Kenall Mfg. Co. All rights reserved.

M4SEDIC-112918

# INDIGO-CLEAN™ ROOM CONTROLLER SYSTEM

## IC100 SERIES

### PRODUCT FEATURES:

- » Room-level Disinfection Mode Control
- » Infrared & Ultrasonic Occupancy Detection

### SPECIFICATIONS

**IC100 CONTROLLER:** Centralized, zonal whole room continuous disinfection. Automatically switches Indigo-Clean luminaires between white disinfection and Indigo-Clean disinfection modes. Receives input from (3) passive-infrared (PIR) and (1) ultrasonic sensor with optional switch (by others). 0-10VDC dimming signal output to luminaires. Integral LED indicators provide system status. Dual technology controller requires input from both PIR and ultrasonic sensors.

**IC100 SENSORS:** Operates by low-voltage power provided by IC100 Controller. **INFRARED:** System includes three (3) passive infrared (PIR) occupancy detection. Lenses provide 360° coverage, 48' diameter from 8' height. Adjustable occupancy time-out delay 0-30 min. **ULTRASONIC:** System includes one (1) high-frequency (40kHz) occupancy detector suitable for open area detection with line-of-sight obstructions; includes sensitivity adjustment. Adjustable occupancy time-out delay 0-30 min.

**CONTROLLER HOUSING:** Seam-welded 18-gauge CRS. White TGIC polyester powder coat finish with five-step pre-treatment. Housings provided with multiple 1/2" and 3/4" conduit knockouts. Controller housing includes clear polycarbonate window for viewing of system status indicators. Silicone gasketing. Pin-tumbler style keyed lock. All locks are keyed alike, two keys included.

**INSTALLATION:** Controller housing suitable for mounting to wall or ceiling surfaces with four-point mounting. All signal cabling shall be wired Class I with 18AWG, 600V TFFN wire. IC100 ultrasonic and PIR sensors suitable for mounting to ceiling junction box.

PROJECT INFORMATION	
Job Name	_____
Fixture Type	_____
Catalog Number	_____
Approved by	_____



Controller



Ultrasonic Sensor  
One (1) included



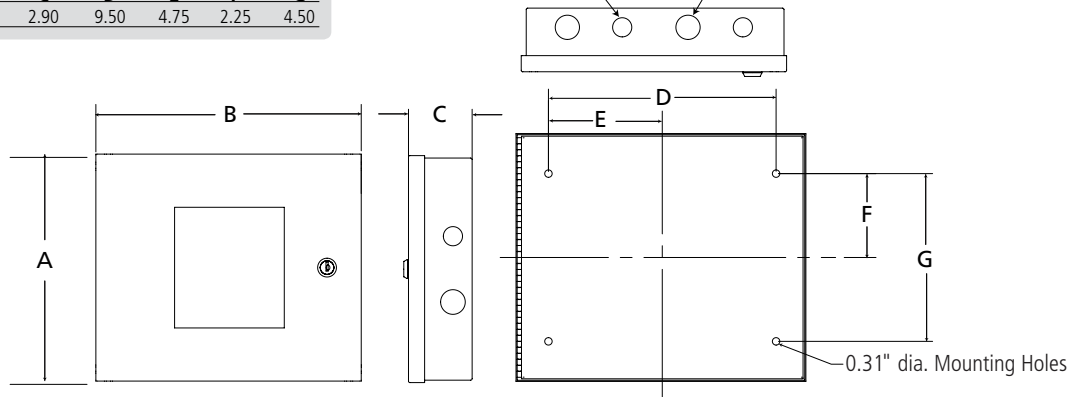
PIR Sensor  
Three (3) included

### CONTROLLER HOUSING

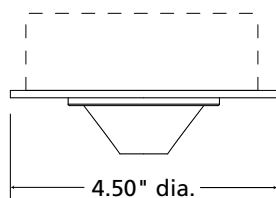
#### DIMENSIONAL DATA (IN INCHES)

A	B	C	D	E	F	G
6.85	14.10	2.90	9.50	4.75	2.25	4.50

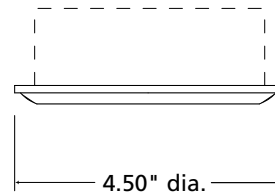
1/2" Conduit Knockout (6 Places Total)      3/4" Conduit Knockout (6 Places Total)



### PIR SENSOR



### ULTRASONIC SENSOR



www.kenall.com

P: 800-4-Kenall

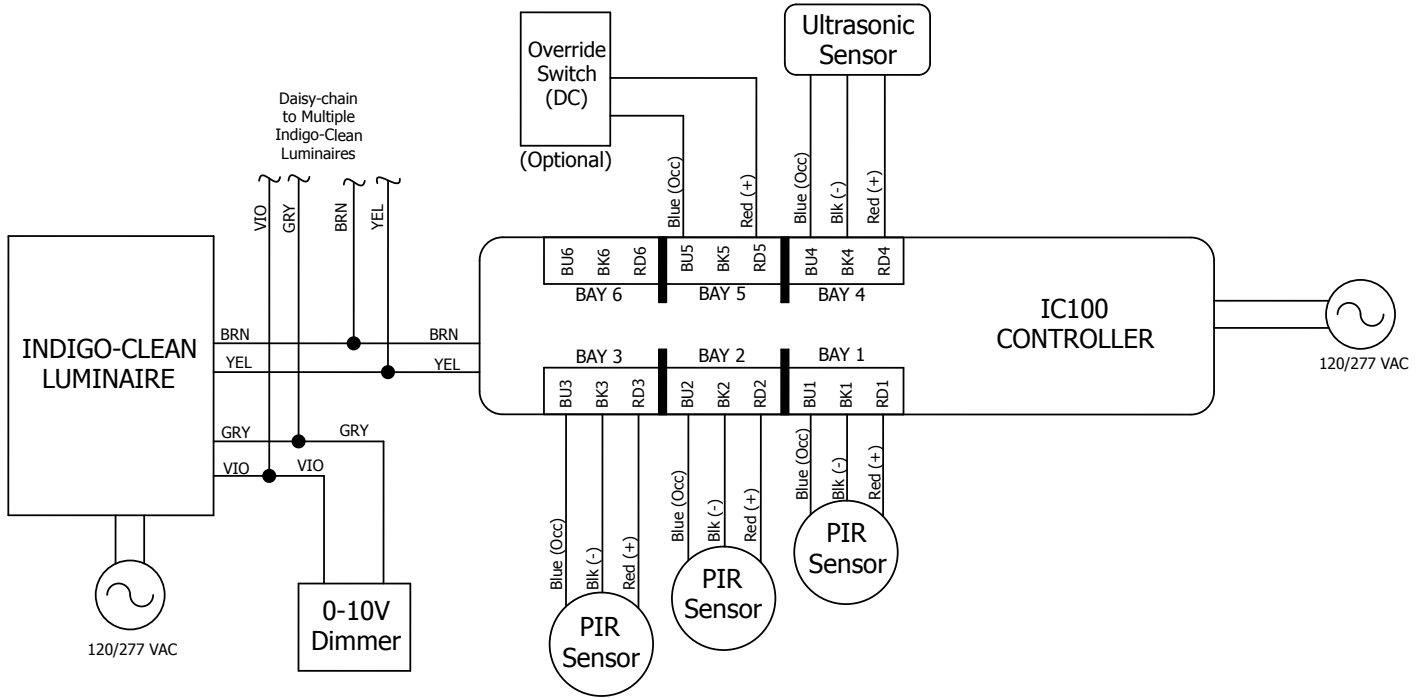
F: 262-891-9701

10200 55th Street Kenosha, Wisconsin 53144

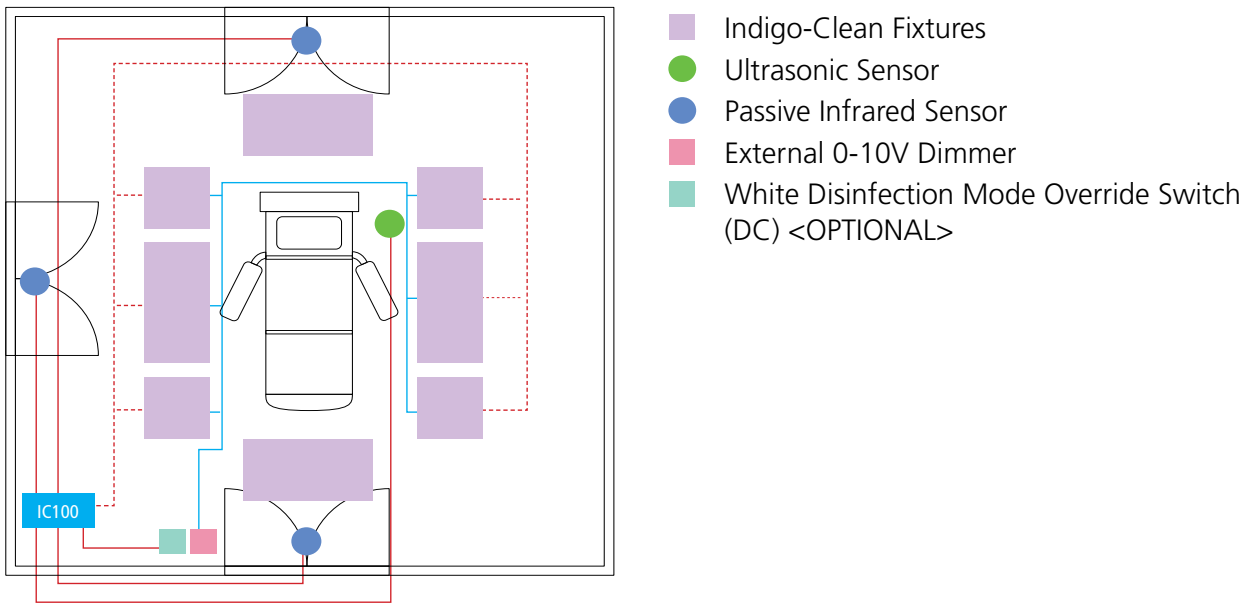
When you see this image, you will know the Kenall product shown or described is designed and manufactured in the USA with components purchased from US suppliers, and meets the Buy American requirements under the ARRA. Kenall has not determined the origin of its domestically purchased components or the subcomponents thereof. May be covered by patents found at www.kenall.com/patents. Content of specification sheets is subject to change; please consult www.kenall.com for current product details. © 2018 Kenall Mfg. Co. All rights reserved.

# INDIGO-CLEAN™ ROOM CONTROLLER SYSTEM

## IC100 SERIES WIRING DIAGRAM



## TYPICAL LUMINAIRE/IC100 CONTROLS ROOM LAYOUT



www.kenall.com

P: 800-4-Kenall

F: 262-891-9701

10200 55th Street Kenosha, Wisconsin 53144

When you see this image, you will know the Kenall product shown or described is designed and manufactured in the USA with components purchased from US suppliers, and meets the Buy American requirements under the ARRA. Kenall has not determined the origin of its domestically purchased components or the subcomponents thereof. May be covered by patents found at www.kenall.com/patents. Content of specification sheets is subject to change; please consult www.kenall.com for current product details. © 2018 Kenall Mfg. Co. All rights reserved.

M45EDIC-112918