

1" KOTO™ MINI DOWNLIGHTING SYSTEM

10.5W-12.5W, 2700K-3000K or Sunset, Up to 1000 lm, 120V



THE KOTO™ MINI SYSTEM

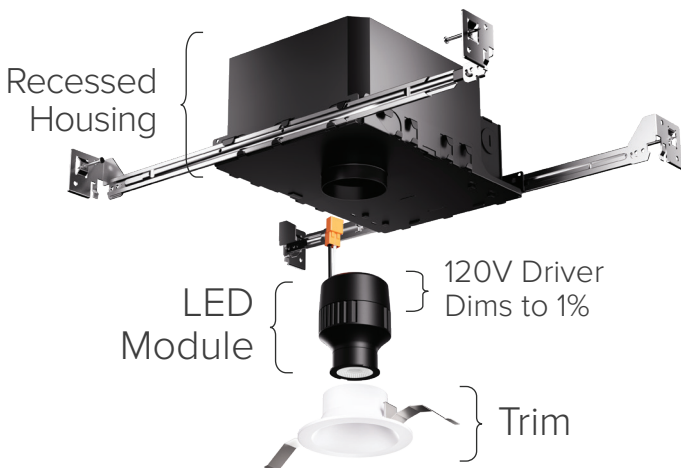
1" modular Downlight. Up to 1000 lumens. A compact and powerful LED lighting solution featuring a premium high-end light engine. Easy to install maintain and upgrade, all from below the ceiling.

FEATURES

- Integral 120V, Triac/ELV dimmable driver (dims to 1% on module for easy maintenance and upgrades
- 25°, 35° and 45° beam angle options
- Excellent color rendering 93+ CRI
- Title 24 JA8-2022 E Listed
- ENERGY STAR Compliant
- Covered by U.S. PATENTS and Patents Pending

SET UP

1. Select a Koto™ Mini Housing
2. Select a Koto™ Mini LED Module.
3. Select a Koto™ Mini Trim.



SPECIFICATIONS

Lumens/Wattage 850 lm (10.5W), 1000 lm (12.5W)

Voltage 120V

Color Temp. 2700K, 3000K & Sunset Dim to Warm

CRI 93+

Damp Location UL Listed With Adjustable Trims

Wet Location UL Listed With Fixed Trims

Dimming Triac/ELV (1%)

Beam Angle 25°, 35° & 45°



Finishes



PRODUCT NUMBER BUILDER

STEP 1. Specify Housing part number (Select one)

Example: EMN175DH2ICA

1" IC AIRTIGHT NEW CONSTRUCTION HOUSINGS

ITEM	STYLE	ICA	
EMN175			
EMN175	IC Airtight New Construction Housings		
	(Blank) Standard Single Head (3 1/2" Height)	ICA IC Airtight	
	DH2 Double Head (3 1/2" Height)	AJICA ¹ IC Airtight for R60 & Chicago Plenum Insulation	
	JB Single Head (4 1/8" Height) 2-Hour Fire Rated Ceilings		
		¹ Only available for Standard Single Head option.	

STEP 2. Specify Koto™ LED Module part number (Select one)

Example: EMN1027

ITEM	LUMENS/WATTAGE	COLOR TEMPERATURE	BEAM ANGLE
EMN			
EMN	Standard Koto™ Mini LED Module		
	10 1000 lm (12.5W)	27* 2700K 30* 3000K	(Blank) ² 35° -N 25° -W 45°
	08 850 lm (10.5W)	SD ¹ Sunset	
		¹ Sunset, Dim to Warm technology, dims from 3000K to 1800K. Available with EMN08 only. [*] 27K & 30K available with EMN10, 1000 lm only.	² 35° installed on module with 25° & 45° included in the box.

Field Changeable Secondary Module Optics		
L60 Frosted Diffuser	L61 Black Hex Louver	L62 White Hex Louver

Koto Modules - Lumen Value Multiplier			
CCT	Multiplier	Beam Angle	Multiplier
2700K	0.96	25°	0.98
3000K	1	35°	1
SD	0.80	45°	1.02

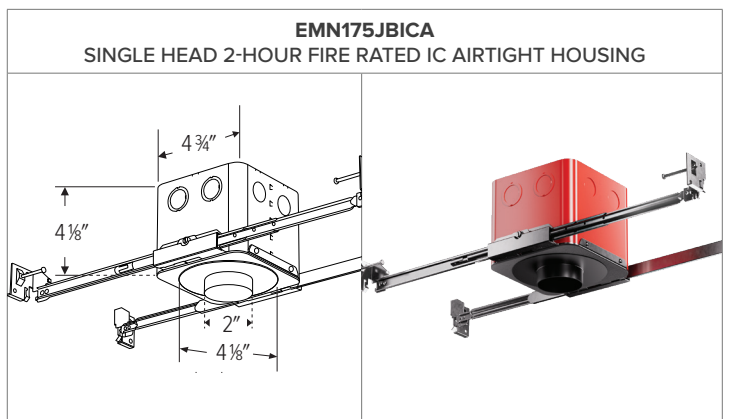
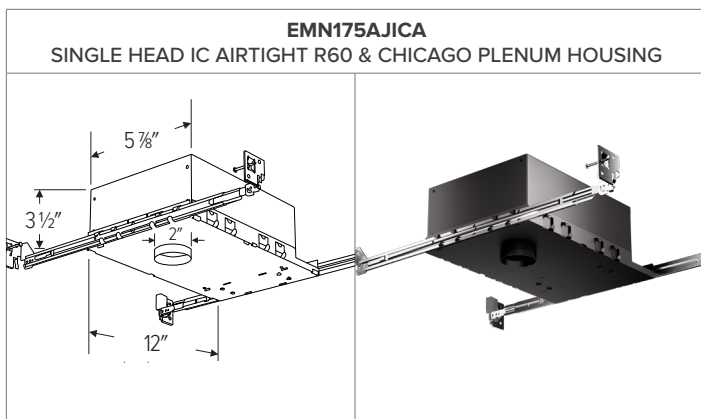
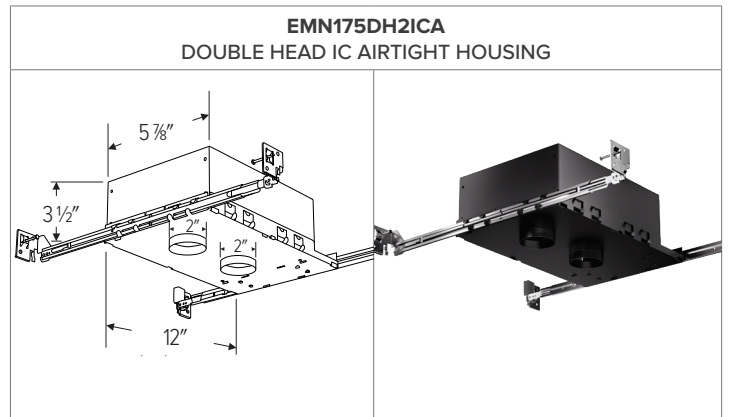
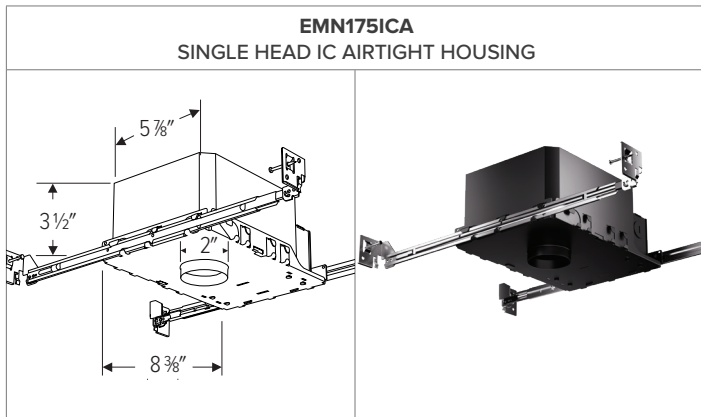
STEP 3. Specify Koto™ Mini Trim part number (Select one)

Example: EMN1RD27W

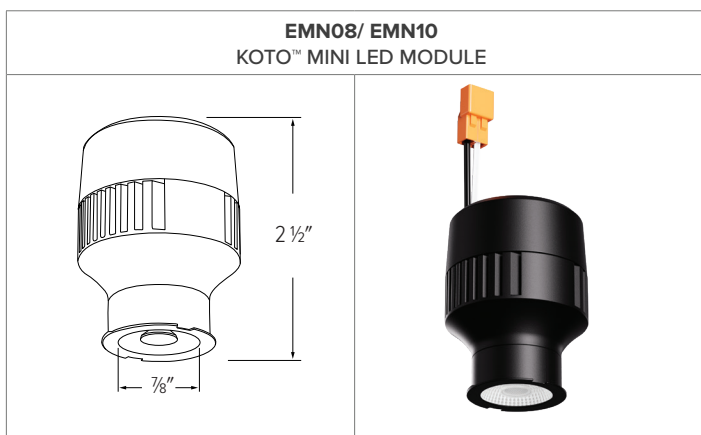
ITEM	SHAPE	STYLE	FINISH
EMN1			
EMN1	1" Koto™ Mini Trims		
	RD Round	18 Mini Downlight	W All White
	SQ Square	29 ¹ Mini Adjustable	BB All Black
		27 Mini Pinhole Adjustable	
		¹ Only available in RD (Round) option	

PRODUCT DIMENSIONS

KOTO™ MINI IC AIRTIGHT HOUSINGS



KOTO™ MINI LED MODULE



PRODUCT DIMENSIONS

KOTO™ MINI TRIMS

EMN1RD18 - 1" MINI ROUND DOWNLIGHT

W (All White)
BB (All Black)

EMN1RD29 - 1" MINI ROUND ADJUSTABLE

W (All White)
B (All Black)

30° Tilt

EMN1RD27 - 1" MINI ROUND PINHOLE ADJUSTABLE

W (All White)
BB (All Black)

30° Tilt

EMN1SQ18 - 1" MINI SQUARE DOWNLIGHT

W (All White)
B (All Black)

EMN1SQ27W - 1" MINI SQUARE PINHOLE ADJUSTABLE

W (All White)
B (All Black)

30° Tilt

ACCESSORIES

FROSTED DIFFUSER	HEX LOUVER
L60 For a softer light	L61 (White) L62 (Black) For a better glare shield

TECHNICAL DETAILS

Optics: Frosted polycarbonate module lens diffuses light evenly throughout while reducing glare with LED technology. Standard lens is shaterproof

Construction (Light Engine): Diecast aluminum body with heat fins allow for efficient cooling

Installation (Light Engine): Twist-on design for toolless trim installation. For use with standard Koto™ Mini trims only. Can be use in 1" Koto Mini™ housings with quick connect.

Hanger Bars: Pre-installed hanger bars with True Nail easy installation in regular lumber, engineered lumber, and laminated beams. Integral T-bar slots for easy installation in T-bars. Spans up 24" and can be repositioned 90°. Score lines allow for tool-free hanger bar size reduction. Integral leveling flange allows for single-person installation while easily aligning the housings with the joists.

LED Technology: Extremely accurate Color Rendering Index of 93+. Lumen Maintenance of 50,000 hours L70 Life based on LM80 standardized test results. Superior Thermal Management by utilizing integrated heat sink. Instant On to Full Brightness technology. No LED pixilation.

Electrical: Module connects to 120V power supply. High efficiency driver with a power factor >0.9. Start time of less than 0.75 seconds.

Dimming: Works with 120V Triac/ELV type dimmers. Dims down to 1%. For full list of dimmers, refer to the Dimmer Compatibility List. Industry leading dimming that dims smoothly with no hot spots or flickering

Sunset: Sunset color temperature is our dim-to-warm LED technology that allows the color temperature to become warmer as the product is dimmed. Our SUNSET items start at 3000K and go as low as 1800K when dimmed. For Sunset dim technology be sure to order an item with "Sunset" in the Color Temperature (CCT) attribute.

Listings: UL and cUL Listed for Damp Locations. UL and cUL Listed for Wet Location with Wet location trims. RoHS Compliant. Meets Energy Star & California Title 24 JA8-2022-E standards.

Warranty: ELCO Products are built to last with a 5-year Limited warranty.

DIMMER COMPATIBILITY CHART

FOR REFERENCE ONLY

Testing conducted by ELCO Lighting is not a substitute for and does not imply certification by an independent laboratory or any other standards certification. Refer to manufacturer specifications for more detailed information on product certifications and standards. Consult the dimmer manufacturer prior to installation to ensure compatibility.

MANUFACTURER	PRODUCT	PART NUMBER	DIMMED LIGHT OUTPUT RANGE
Lutron	Caséta Wireless In-Wall Dimmer (PD-6WCL)	PD-6WCL	1% - 100%
	Maestro PRO LED + Tap Dimme, 250 Watts of dimmable LED/CFL, 500 Watts of incandescent/halogen/ELV, or 400VA MLV lighting loads	MA-PRO	1% - 100%
	Maestro LED+ Dimmer Switch 150 W LED/CFL, 150W of dimmable LEDs, 600W of incandescent or halogen lighting	MACL-153M	1% - 100%
	Skylark Contour LED+ Preset Dimmer, Incandescent / Halogen, 600 W, 120 V, LED / CFL, 150 W, 120 V	CTCL-153P	1% - 100%
	Diva LED, Single Pole, 3-Way, LED+ Preset Dimmer, Incandescent / Halogen, 120 V, LED / CFL, 120 V	DVCL-153P	1% - 100%
	Skylark LED+, Single Pole, 3-Way, LED+ Dimmer, Incandescent / Halogen, 600 W, 120 V, LED / CFL, 150 W, 120 V	SCL-153P	1% - 100%
	Maestro, 600 W/600 VA Neutral Wire Dimmer, 120 V - 50/60 Hz	RRD-6ND	1% - 100%
	Preset Dimmers, Single Pole, Magnetic Low Voltage, 120 V	DVLV-600P	1% - 100%
	Ariadni® / Toggler® 600 W Incandescent/Halogen Preset Dimmer (3-Way)	AY-603P	1% - 100%
	RadioRa 3 250 W (LED/CFL)* or 500 W Incandescent/Halogen/ELV or 400 VA MLV Phase Selectable Neutral Dimmer	RRST-PRO-N	1% - 100%
Leviton	Decora Digital Dimmer Switch, Low Voltage/LED/CFL/Incandescent dimmer with Bluetooth & timer	DDE06-BLZ	1% - 100%
	Trimatron Rotary Dimmer Switch Universal Dimmer, Single pole, 600W Incandescent, 150W LED, CFL	RNL06	1% - 100%
	Decora SureSlide Dimmer Switch for Dimmable LED, Halogen, and Incandescent Bulbs	6672	5% - 100%
	Decora SureSlide Dimmer Switch for Dimmable LED, Halogen, and Incandescent Bulbs	6674	5% - 100%

***NOTE: Refer to dimmer manufacturer's documentation for installation instructions and circuit details**

Disclaimer: Minimum and maximum loads for LEDs and CFLs are given in number of lamps and may vary depending on the lamp being used. Testing conducted by ELCO Lighting is not a substitute for and does not imply certification by an independent laboratory or any other standards certification. Refer to manufacturer specifications for more detailed information on product certifications and standards.

Integrating our lighting with your Smart Home System is a breeze. Simply check your Smart Home system for compatible smart switches and cross reference that with our Dimming Compatibility Chart. Once the switches are integrated with your Smart Home system your lights will be ready to go.



KOTO™ MINI LED MODULE

PHOTOMETRIC REPORT	CANDLE POWER SUMMARY		ILLUMINANCE AT A DISTANCE		
Product #: EMN1030 (25°) Wattage / Lumens: 9.8W / 988.8 lm Luminaire LPW: 100.8 lm/W	Degree Vertical	0°	Distance to Target Plane	Center Beam Footcandles	Beam Diameter
	0	3560	4'	222	1.9'
	5	3109	6'	98.9	2.8'
	15	1165	8'	55.6	3.7'
	25	270	10'	35.6	4.7'
	35	57	ZONAL LUMEN SUMMARY		
	45	23			
	55	14	Zone	Lumens	%Luminaire
	65	9	0-30°	884.0	89.5
	75	6	0-40°	942.4	95.4
	85	0	0-60°	976.4	98.8
	90	0	0-90°	988.0	100

PHOTOMETRIC REPORT	CANDLE POWER SUMMARY		ILLUMINANCE AT A DISTANCE		
Product #: EMN1030 (35°) Wattage / Lumens: 9.8W / 992.8 lm Luminaire LPW: 101.3 lm/W	Degree Vertical	0°	Distance to Target Plane	Center Beam Footcandles	Beam Diameter
	0	2450	4'	153	2.7'
	5	2302	6'	68.0	4.1'
	15	1634	8'	38.3	5.5'
	25	433	10'	24.5	6.8'
	35	51	ZONAL LUMEN SUMMARY		
	45	23			
	55	17	Zone	Lumens	%Luminaire
	65	12	0-30°	904.1	91.1
	75	7	0-40°	943.9	95.1
	85	0	0-60°	974.8	98.2
	90	0	0-90°	992.3	100

PHOTOMETRIC REPORT	CANDLE POWER SUMMARY		ILLUMINANCE AT A DISTANCE		
Product #: EMN1030 (45°) Wattage / Lumens: 9.69W / 960 lm Luminaire LPW: 99 lm/W	Degree Vertical	0°	Distance to Target Plane	Center Beam Footcandles	Beam Diameter
	0	1892	4'	118	2.8'
	5	1955	6'	52.6	4.1'
	15	1724	8'	29.6	5.5'
	25	976	10'	18.9	6.9'
	35	301	ZONAL LUMEN SUMMARY		
	45	62			
	55	27	Zone	Lumens	%Luminaire
	65	18	0-30°	787.9	82.1
	75	12	0-40°	883.4	92
	85	6	0-60°	933.5	97.2
	90	3	0-90°	959.7	100

PHOTOMETRIC REPORT	CANDLE POWER SUMMARY		ILLUMINANCE AT A DISTANCE		
Product #: EMN1030 (55°) Wattage / Lumens: 9.8W / 1021.3 lm Luminaire LPW: 104.2 lm/W	Degree Vertical	0°	Distance to Target Plane	Center Beam Footcandles	Beam Diameter
	0	1025	4'	64.1	4.3'
	5	999	6'	28.5	6.4'
	15	867	8'	16.0	8.6'
	25	563	10'	10.3	10.7'
	35	263	ZONAL LUMEN SUMMARY		
	45	78			
	55	16	Zone	Lumens	%Luminaire
	65	9	0-30°	694.9	68.1
	75	3	0-40°	910.2	89.1
	85	1	0-60°	1,005.6	98.5
	90	0	0-90°	1,021.0	100