TECHLIGHT
INNOVATOR AND LEADER IN THE LIGHTING INDUSTRY

KTN M SERIES

Katen Medium LED Area Light

Catalog Number	
Project	Type

Fixture Weight (Approx)	
KTN-M	14.0 lbs

SERIES	LENGTH / WIDTH / HEIGHT	Fixture Weight (Approx)
KTN M	22" x 13.6" x 2.5"	14.0 lbs

FEATURES & SPECIFICATIONS

APPLICATION — The Katen Medium Series of LED luminaires is designed for new outdoor lighting installations and as a replacement for HID area lights. Its compact, one-piece die-cast housing reduces cost compared to multi-part designs, while the integrated heat sink ensures efficient thermal management. The standard arm mount is compatible with SSA drilled Techlight poles, providing strength and simplifying installation. Optional twist-lock photocontrol offers additional energy savings, and an optional PIR motion sensor enhances security and efficiency. Ideal for medium-scale applications such as parking lots, retail centers, quick-service restaurants, and general area lighting. The KTN M delivers 20,000 to 45,000 lumens, providing excellent photometric performance and replacing HID luminaires up to 400W.

CONSTRUCTION — The KTN M features a heavy-duty, one-piece die-cast aluminum housing with an integrated heat sink for superior thermal performance. Silicone gaskets seal all critical points, ensuring IP-rated protection against dust and moisture for reliable operation in outdoor environments. The housing includes an easy-access door on the bottom of the mounting arm, allowing wiring without opening the electrical compartment, reducing installation time and labor costs.

OPTICAL SYSTEM — The KTN M uses Full Cutoff optics to minimize glare and light pollution, meeting Dark Sky requirements. Optical assemblies are engineered for precise photometric performance, delivering uniform illumination across medium-sized areas. Multiple beam configurations are available to suit various site layouts, ensuring flexibility and optimal light coverage. Optical components are constructed from polycarbonate and are UV-rated for long-term durability and clarity.

ELECTRICAL SYSTEM — The KTN M delivers up to 45,000 nominal lumens in most optical distributions, with color temperature options of 3000K Warm White, 4000K Neutral White, or 5000K Cool White. It operates on universal input voltage (120–277Vac, 50/60Hz) and offers 277/480Vac high-voltage options. Rated for an operating temperature range of -40°C to 40°C, ensuring dependable performance in extreme conditions. Includes built-in 10kA surge protection and conforms to UL8750 standards.

MOUNTING — The KTN M offers multiple mounting configurations designed for one-for-one retrofit solutions, replacing existing metal halide or high-pressure sodium fixtures. The integral universal mounting mechanism allows the luminaire to be easily installed on most existing drill hole patterns, including SSA drilled Techlight poles, providing significant labor savings. Additional mounting options include a mast arm adapter, adjustable integral slipfitter, and other configurations for custom applications.

FINISH — The fixture features an E-Coated corrosion-resistant epoxy layer applied prior to a super-durable polyester powder coat finish, forming a uniform protective barrier for maximum durability. Standard colors: Black, Bronze, US Green, White. Custom colors available upon request.

WARRANTY — The complete luminaire is covered by a 5-year limited warranty.

ORDERING INFORMATION

Choose the bold face options for the appropriate luminaire configuration for your application and enter on the line above each fixture attribute. Accessories may be factory installed, depending on the particular accessory chosen, but still be ordered as a separate line item.

EXAMPLE:
KTN M C 20L T3 1 BZ

KTN M							
SERIES	CCT	NOMINAL LUMENS	OPTIC	VOLTAGE	OPTIC ROTATION	FINISH	FACTORY INSTALLED OPTIONS - CONTROLS & SENSORS
KTN M	**W** = 3000K **N** = 4000K **C** = 5000K	**20L** = 20,000 lumens **25L** = 25,000 lumens **30L** = 30,000 lumens **35L** = 35,000 lumens **40L** = 40,000 lumens **45L** = 45,000 lumens	**T3** = Type III **T4** = Type IV **T5W** = Type V Wide	**1** = 120-277V[1] **3** = 277-480V[1]	**L** = Left Rotated Optics **R** = Right Rotated Optics (Leave Blank for standard optics)	**BZ** = Bronze **BK** = Black **WH** = White **GR** = Green **SLV** = Silver	**Bluetooth Networked Controls – System A** **LRBTC** = Bluetooth network controller for wireless grouping, scheduling, and control (120–277V). **LRBTC480** = Bluetooth network controller for wireless grouping, scheduling, and control (277–480V). **IMSBTM** = Networked Bluetooth motion & daylight sensor with integrated controller; includes WHBL1 lens. **Bluetooth Networked Controls – (Casambi) System B** **BTEC** = Integrated Bluetooth control module for Casambi wireless grouping and control. **Standalone IMS (Non-Networked) Controls** **IMS** = Fixture-mounted PIR motion sensor; local control only; (1 of 2) lens below required & ordered separately. **TLWSFSP-L3** = 360° PIR lens for IMS; approx. 40' coverage diameter at 20' mounting height. **TLWSFSP-L7** = 360° PIR lens for IMS; approx. 100' coverage diameter at 40' mounting height. **Photocell Receptacles & Accessories** **PC2** = 480V twist-lock photocell receptacle for dusk-to-dawn control. **PC7** = Multi-tap (105–285V) twist-lock photocell receptacle for dusk-to-dawn control. **PCR7** = 7-pin ANSI C136.41 twist-lock photocell receptacle for photocells or control nodes with Shorting Cap.

ACCESSORIES (Order as separate line items)

TLWSFSIR-100	Remote Handheld Sensor Configuration Tool for IMS
105141	Bluetooth Timekeeper with Enclosu re and Antenna
KTN 4RA(XX)	4" Round Pole Adapter
KTN 5RA (XX)	5" Round Pole Adapter
KTN 2AF (XX)	2-3/8" ID Adjustable Slip Fitter
KTN ARM (XX)	Arm
KTN B15 (XX)	Trunnion Mount
QMB-WM (XX)	Quick Mount Bracket - Wall Mount
KTNSSAADPTRKIT[2] (XX)	SSA Adapter Hardware Kit
132896 (XX)	2" SSA-Extension Mount for Round Pole
132897 (XX)	2" SSA-Extension Mount for Square Pole
S260 (XX)	8" House Side Shield for KTN M
S277 (XX)	12" House Side Shield for KTN M
S302 (XX)	4 Sided Shield for for KTN M
PSJ163-600	16 Gauge 3 Strand Lead Wire (color coded)

(XX) = **Finish Option**.
Substitute XX w/ Finish Codes w/in part #'s above

NOTES

1 = Built-in 10kA Surge Protection.

2 = Required for **select SSA extension arms**, **CCS7** arm, and **LDV** arm mounting applications. Not required for standard fixture mounting configurations. **Consult factory for compatibility.**

CONTROLS FOOTNOTES

Bluetooth Network Requirement – System A: When Bluetooth scheduling or time-based control is required (105141), each fixture must also include one System A network device: **IMSBTM, LRBTC, or LRBTC480**

System Compatibility: Bluetooth devices from different systems **are not compatible** and cannot be combined within the same installation.

IMS Sensor Lens Requirement: **IMS** standalone motion sensors require a lens to be ordered separately. **IMSBTM** includes a factory-installed **WHBL1** lens.

Photocell Receptacles: Photocell receptacles are independent of Bluetooth control systems and may be used with compatible control options.

2009 McKenzie Drive Suite 110. | Carrollton, TX 75006 | PH: 800.225.0727 | www.techlight.com |

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KTN M Katen Medium LED Area Light

BLUETOOTH NETWORKED CONTROLS – SYSTEM A

LRBTC
Bluetooth Controller with Long-Range Antenna (120V-277V)

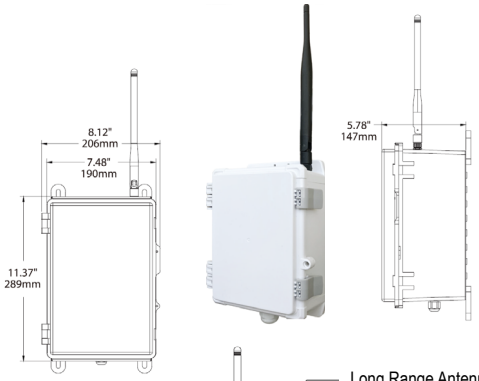
Bluetooth Transmit: 1640ft Max
Operating Temperature: -22°F to 131°F
IP Rating: IP65
Compliance: UL1376

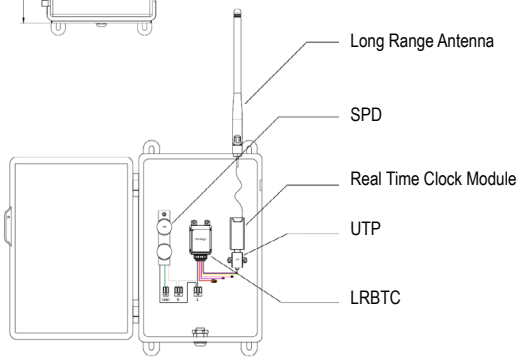
LRBTC480
Bluetooth Controller with Long-Range Antenna (277-480V)

Bluetooth Transmit: 328ft Max
Operating Temperature: -22°F to 149°F
IP Rating: IP65
Compliance: UL8750, UL1376

105141*
Bluetooth Timekeeper with Enclosure and Antenna
Cannot be used with any other Photocell or time switch device.

*When Bluetooth scheduling or time-based control is required (105141); each fixture must also include one System A network device: **IMSBTM, LRBTC, or LRBTC480.**





IMSBTM
AC Powered Internal Network Wireless PIR & Daylight Harvesting Sensor.
Includes **WHBL1** lens (factory installed)

WHBL1 360° PIR lens, maximum coverage 80' dia. from 40' height.

(**IMSBTM** is included with the WHBL1 and is not available as a standalone option).

Network Lighting Control App Instruction Manual
located on the Techlight Website -> Resources Page.
Location shown below, ***or*** scan the QR code.
https://techlight.com/pdf/IMSBTM%20Manual.pdf

Photocell Receptacles

PC2
347-480V Twist-Lock Photocell

PC7
Multi-Tap (105-285V) Twist-Lock Photocell

PCR7
7-Pin Twist-Lock Photocell Receptacle ANSI C136.41 and Receptacle Shorting Cap

Standalone (Non-Networked Controls

IMS - FIXTURE MOUNT - MOTION SENSOR

APPLICATION — The sensor is ideal for areas such as parking facilities, gas stations, pedestrian pathways, and warehouses. A choice of four lenses ensures complete coverage for mounting heights up to 40'.

OPERATION — Typically, the sensor ramps lighting On to the selected High mode level when motion is detected and the ambient light level is below the hold off setpoint. After the sensor stops detecting movement and the time delay elapses, lights fade to the Low mode level. If there is no motion during the subsequent cut off time delay, the lights will turn Off. For dusk to dawn control, the integral photocell can switch the lights On and Off based on the ambient light level so that lighting remains on overnight even without motion detection.

FEATURES —

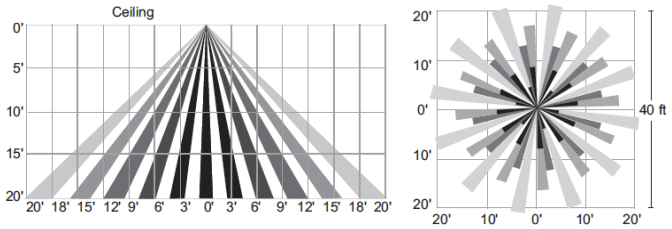
- **Provides line voltage On/Off switching**
- **High and low modes fully adjustable from 0 to 10V**
- **Optional cut off delay**
- **Adjustable ramp up and fade down times**
- **Optional daylighting setpoints feature automatic calibration, or permit manual adjustment**
- **Polycarbonate construction; flame retardant, UV resistant, impact resistant, recyclable**
- **UL244A and UL508**

TLWSFSIR-100
Remote Handheld Sensor Configuration Tool for **IMS**

LENSES FIELD OF VIEW (1 of 2) lens below required with **IMS** & ordered separately.

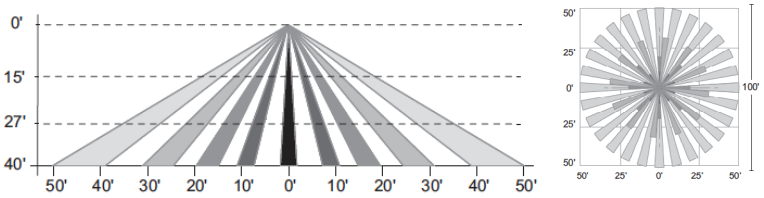
TLWSFSP-L3

360° lens, maximum coverage 40' diameter from 20' height



TLWSFSP-L7

360° lens, maximum coverage 100' diameter from 40' height



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KTN M **Katen Medium LED Area Light**

LUMINAIRE CHARACTERISTICS

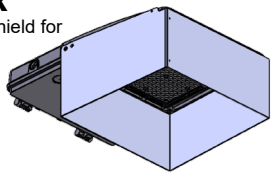
Data below is for Cool White (5000K) and Netural White (4000K)

Nominal Lumens	System Wattage	Delivered Lumens/Optic Type					
		TYPE III		TYPE IV		TYPE 5W	
		Lumens	Lm/W	Lumens	Lm/W	Lumens	Lm/W
20L	117W	20,475 B3-U0-G3	175	20,416 B3-U0-G2	174	20,358 B4-U0-G2	174
25L	148W	25,160 B3-U0-G3	170	25,012 B3-U0-G3	169	25,160 B5-U0-G3	169
30L	185W	30,340 B3-U0-G3	164	30,320 B3-U0-G3	164	30,360 B5-U0-G3	164
35L	223W	35,234 B4-U0-G3	158	35,457 B3-U0-G3	159	35,450 B5-U0-G3	159
40L	262W	40,095 B4-U0-G3	153	40,086 B4-U0-G3	153	40,348 B5-U0-G4	154
45L	301W	44,247 B4-U0-G3	147	44,230 B4-U0-G3	147	44,849 B5-U0-G4	149

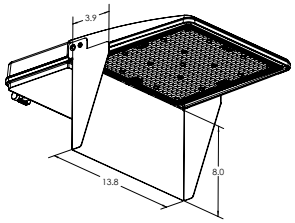
System Wattage	L70 @ 25°C	Amperage Draw				
		120V	208V	277V	347V	480V
117W	>50K Hrs.	0.98A	0.56A	0.42A	0.34A	0.24A
148W	>50K Hrs.	1.23A	0.71A	0.53A	0.43A	0.31A
185W	>50K Hrs.	1.54A	0.89A	0.67A	0.53A	0.39A
223W	>50K Hrs.	1.90A	1.07A	0.81A	0.64A	0.46A
262W	>50K Hrs.	2.20A	1.26A	0.95A	0.76A	0.55A
301W	>50K Hrs.	2.50A	1.45A	1.09A	0.87A	0.63A

SHIELDS (Order as separate line items)

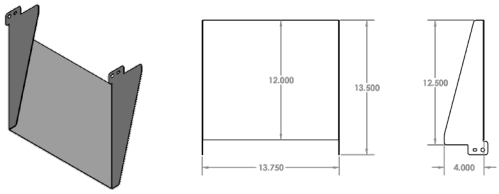
S302BK
4 Sided Shield for
for KTN M



S260BZ
8" House Side Shield for for KTN M



S277BZ
12" House Side Shield for for KTN M



ARMS & ACCESSORIES (Order as separate line items)

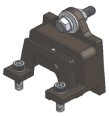
KTN 2AF
Slip Fitter

KTN ARM
Arm

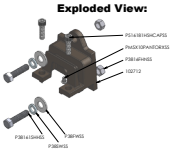
KTN B15
Trunnion Mount
w/side adaptor

KTN 4RA or KTN 5RA
4" or 5" Round Pole Adapter

KTNSSAADPTRKIT
SSA Adapter Hardware Kit

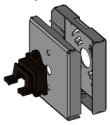


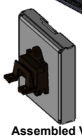
Exploded View:



QMB-WM
Quick Mount Bracket
- Wall Mount

Exploded View





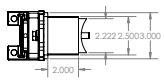
Assembled View

QMB-WM w/ Fixture

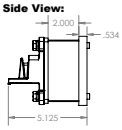
2" SSA-Extensions

132896 (FOR ROUND POLE)
2" SSA-Extension Mount for Round Pole

Overhead View:



Side View:



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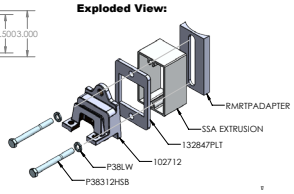
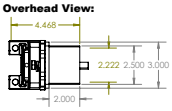
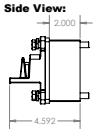


132897 (FOR SQUARE POLE)
2" SSA-Extension Mount for Square Pole

Overhead View:



Side View:



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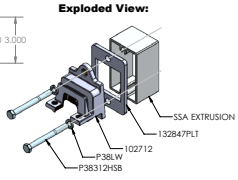
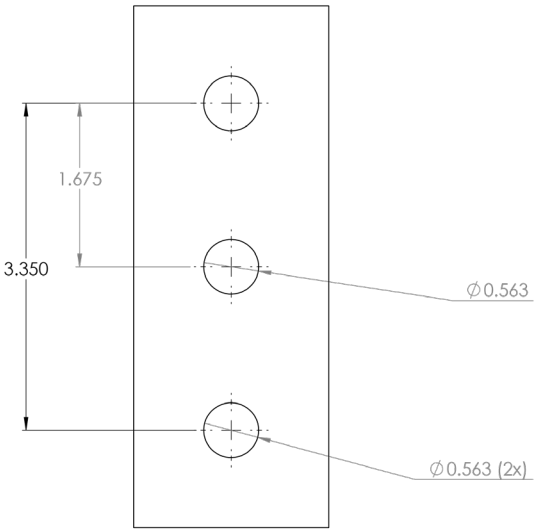


SSA Drill Measurements

For Refrence Only



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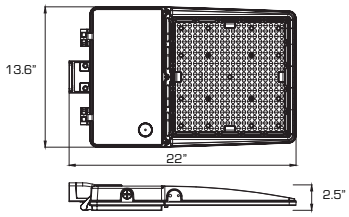
KTN M **Katen Medium LED Area Light**

AVAILABLE FIXTURE DIMENSIONS

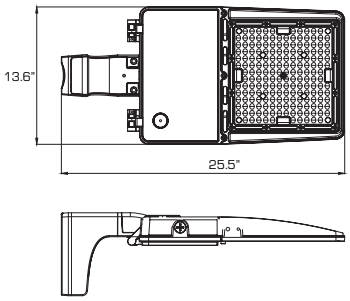
Dimensions shown are for fixture bodies only. Mounting options must be ordered separately.
Fixture shown with arm sold seperately.

Fixture Weight (Approx)	
KTN-M	14.0 lbs

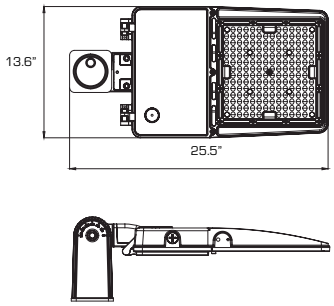
KTN 20L - 45L



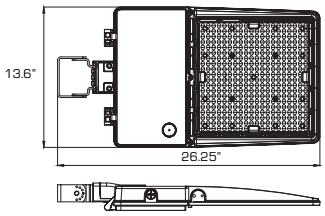
KTN ARM
Fixed Arm Mount



KTN 2AF
Slipfitter Mount



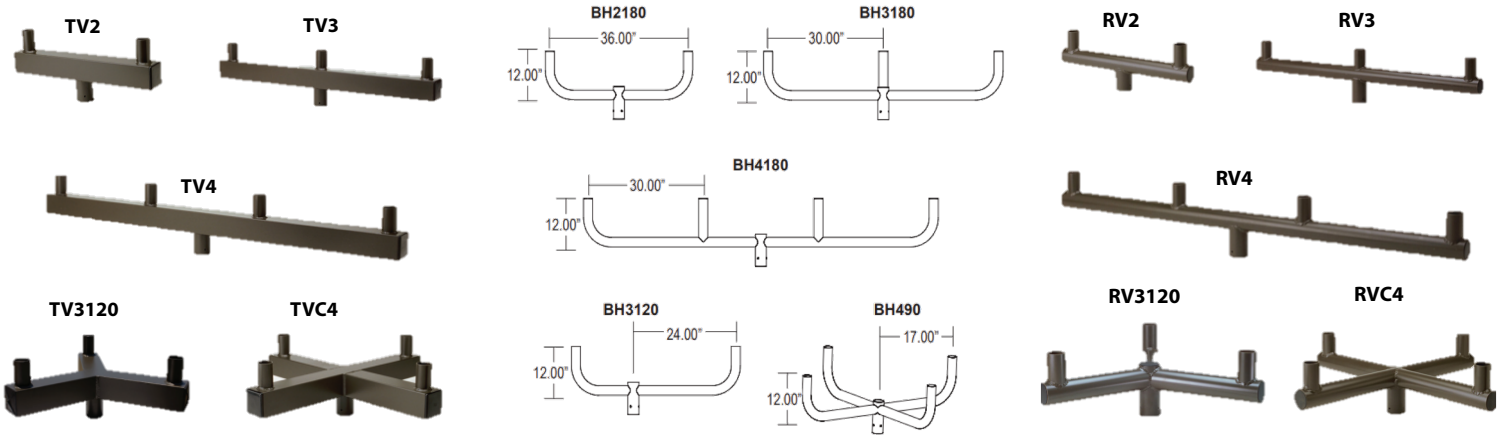
KTN B15
Trunnion Mount



EPA's RATING FOR VARIOUS MOUNTING CONFIGURATIONS [FT²]

Angle	0	20	30	45	60
TV2	1.60	2.40	3.00	3.70	4.30
TV3	2.70	3.90	4.80	5.90	6.70
TV3120	1.90	2.80	3.40	4.10	4.70
TV4	3.80	5.40	6.60	8.10	9.20
TVC4	2.40	3.30	3.90	4.60	5.20
BH2180	1.10	1.90	2.50	3.20	3.80
BH3180	1.70	2.90	3.80	4.90	5.70
BH3120	1.40	2.40	2.90	3.70	4.20
BH4180	2.40	4.10	5.20	6.70	7.80
BH490	1.80	2.70	3.30	4.00	4.60
RV2	1.00	1.90	2.40	3.20	3.70
RV3	1.70	2.90	3.80	4.90	5.70
RV3120	1.30	2.30	2.80	3.60	4.10
RV4	2.30	3.90	5.10	6.60	7.70
RVC4	1.70	2.60	3.20	3.90	4.50
KTN 2AF	0.50	0.90	1.20	1.50	1.80
KTN B15	0.40	0.80	1.10	1.50	1.80
KTN ARM	0.50	n/a	n/a	n/a	n/a
KTN ARM 2180	0.90	n/a	n/a	n/a	n/a
KTN ARM 290	0.80	n/a	n/a	n/a	n/a
KTN ARM 3120	1.30	n/a	n/a	n/a	n/a
KTN ARM 3121	1.30	n/a	n/a	n/a	n/a
KTN ARM 490	1.60	n/a	n/a	n/a	n/a

Mounting Options



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