



KIM LIGHTING

MX21P Post Top Mounted

Matrix™ Luminaire

revision 10/1/08 • mx21p.pdf

Type:
Job:
Catalog number:

Approvals:

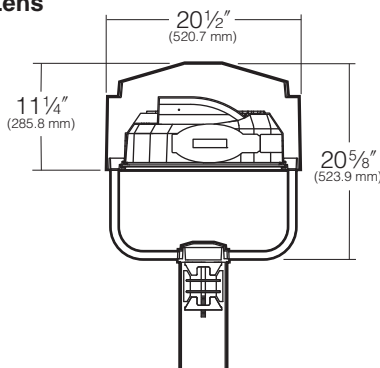
/	/	/	/
Mtg.	Fixture	Electrical Module	Finish
See page 2		See page 3	Options See pages 4 and 5

Date:
Page: 1 of 5

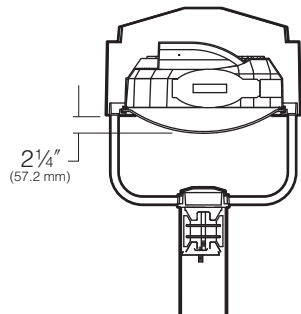
Select pole from Kim Arms and Poles Selection Guide. If pole is provided by others indicate O.D. for arm fitting.

Specifications

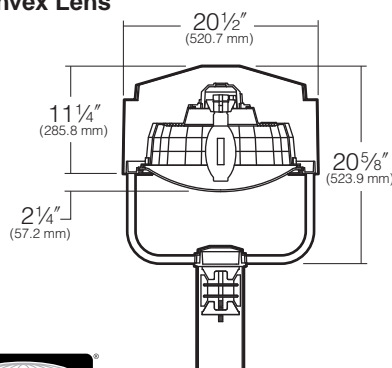
Horizontal Lamp
Flat Lens



Horizontal Lamp
with optional
Convex Lens



Vertical Lamp
Convex Lens



Housing: One-piece die-cast, low-copper (<0.6% Cu) aluminum alloy with stepped top edge and integral cooling fins to increase surface area for inductive component cooling. All hardware is stainless steel. A stainless steel self-locking stop-arm is provided to hold the housing in the open position while servicing.

Lens Frame and Yoke: One-piece die-cast, low-copper (<0.6% Cu) aluminum alloy with 1" minimum thickness around the gasket flange for rigidity. Stainless steel hinges provided for attachment to the housing. Two stainless steel thumb latches are recessed into the side corners, concealed from normal view. The 3/8" thick clear flat or convex tempered glass lens seals against the reflector flange by a one piece extruded silicone gasket with the ends fused to produce a continuous loop, to eliminate gaps that allow the intrusion of foreign objects into the optical system. Lens frame is supported at four points by two aluminum U-shaped tubular arms cradled in a cast aluminum hub. Arms are welded to the lens frame, and welded to the hub along their longitudinal axis. Hub contains a field-splice compartment, a cast aluminum cover and one of the following pole attachment means: **FM** - Flush Mounting or **PT** - Pole Tenon Mounting.

Reflector Module: Specular Alzak® optical segments are rigidly mounted within a die-cast aluminum enclosure which attaches to the housing as a one piece module. Reflectors are field rotatable in 90° increments. All sockets are factory prewired with a quick-disconnect plug for the ballast module. Wire penetrations to the socket are sealed by a silicone gasket to create a totally sealed optical chamber. The optical segments are positioned so that reflected light does not pass through the lamp arc tube. All vertical reflectors and all HPS and PMH horizontal reflectors are equipped with a mogul base socket rated 4KV. All optical systems are interchangeable within the housing.

Electrical Module: All electrical components are UL and CSA recognized, mounted on a single plate and factory prewired with quick-disconnect plugs for attachment to the incoming wires and the socket wires. The module attaches inside the housing using keyhole slots. All ballasts are high power factor with starting temperatures of -40°F. for HPS and -20°F. for PMH lamp modes. Fixtures must be grounded in accordance with local codes or the National Electrical Code. Failure to do so may result in serious personal injury.

Finish: Super TGIC thermoset polyester powder coat paint, 2.5 mil nominal thickness, applied over a titanated zirconium conversion coating; A.S.T.M. 2500 hour salt spray test endurance rating. Standard colors are Black, Dark Bronze, Light Gray, Stealth Gray™, Platinum Silver, or White. Custom colors are available.

CAUTION: Fixtures must be grounded in accordance with national, state and/or local electrical codes. Failure to do so may result in serious personal injury.

Listings and Ratings		
UL cUL 1598 ¹	4G Vibration ²	25C Ambient
IP66 Rated	CO Cut Off ³ (Flat Glass Lens Only)	CE

¹Suitable for wet locations

²5K Cycle Tested

³Dark Sky Legislation Compliant

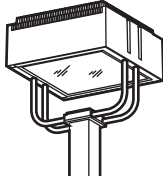
KIM LIGHTING RESERVES THE RIGHT TO CHANGE SPECIFICATIONS WITHOUT NOTICE.



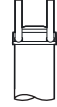
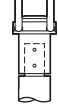
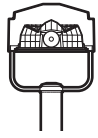





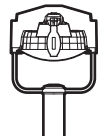


U.S. Patents D426,010

Type:

Job:



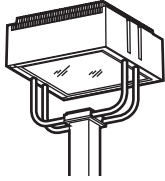
Standard Features

<p>Mounting</p>	<p>E.P.A.: 1.7</p> <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;">  <input type="checkbox"/> FM Flush Mount </div> <div style="text-align: center;">  <input type="checkbox"/> PT Pole Tenon Mount </div> </div> <hr/> <p>Cat. No: Pole Top Requirements: <input type="checkbox"/> FM Flush Mount <input type="checkbox"/> PT Pole Tenon Mount</p> <p>Cat. No: Pole Top Requirements: 4", 5", or 6" Square 2" Pipe-size Tenon (2 3/8" O.D. x 4 1/2" L)</p>	
<p>Fixture Cat. No. designates MX21P fixture and light distribution. See the Kim Site/Roadway Optical Systems Catalog for detailed information on reflector design and application.</p>	<p>Horizontal Lamp</p> <div style="display: flex; justify-content: space-between; align-items: center;"> <div style="text-align: center;">  </div> <div style="display: flex; justify-content: space-around;"> <div style="text-align: center;">  Type I Full Cutoff Cat. No.: <input type="checkbox"/> MX21P1 </div> <div style="text-align: center;">  Type II Full Cutoff Cat. No.: <input type="checkbox"/> MX21P2 </div> <div style="text-align: center;">  Type III Full Cutoff Cat. No.: <input type="checkbox"/> MX21P3 </div> <div style="text-align: center;">  Type IV Forward Throw Full Cutoff Cat. No.: <input type="checkbox"/> MX21P4 </div> <div style="text-align: center;">  Type V Square Full Cutoff Cat. No.: <input type="checkbox"/> MX21P5 </div> </div> </div> <hr/> <p>Vertical Lamp</p> <div style="display: flex; justify-content: space-between; align-items: center;"> <div style="text-align: center;">  </div> <div style="display: flex; justify-content: space-around;"> <div style="text-align: center;">  Asymmetric Cat. No.: <input type="checkbox"/> MX21PF3 </div> <div style="text-align: center;">  Symmetric Square Cat. No.: <input type="checkbox"/> MX21PF5 </div> </div> </div>	

Type:

Job:

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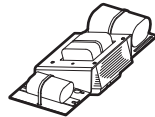


Standard Features

Electrical Module

HPS = High Pressure Sodium

PMH = Pulse Start Metal Halide



Lamp Watts	Lamp Type	Line Volts
400	HPS	277

Cat. Nos. for Electrical Modules available:

High Pressure Sodium

<input type="checkbox"/> 150HPS120	<input type="checkbox"/> 250HPS120	<input type="checkbox"/> 400HPS120
<input type="checkbox"/> 150HPS208	<input type="checkbox"/> 250HPS208	<input type="checkbox"/> 400HPS208
<input type="checkbox"/> 150HPS240	<input type="checkbox"/> 250HPS240	<input type="checkbox"/> 400HPS240
<input type="checkbox"/> 150HPS277	<input type="checkbox"/> 250HPS277	<input type="checkbox"/> 400HPS277
<input type="checkbox"/> 150HPS347	<input type="checkbox"/> 250HPS347	<input type="checkbox"/> 400HPS347
<input type="checkbox"/> 150HPS480	<input type="checkbox"/> 250HPS480	<input type="checkbox"/> 400HPS480

Lamp	E-23 1/2 Clear	E-18 Clear	E-18 Clear
Socket	Mogul Base	Mogul Base	Mogul Base
ANSI Ballast	S-55	S-50	S-51

Pulse Start Metal Halide¹

<input type="checkbox"/> 175PMH120	<input type="checkbox"/> 250PMH120	<input type="checkbox"/> 320PMH120	<input type="checkbox"/> 350PMH120	<input type="checkbox"/> 400PMH120
<input type="checkbox"/> 175PMH208	<input type="checkbox"/> 250PMH208	<input type="checkbox"/> 320PMH208	<input type="checkbox"/> 350PMH208	<input type="checkbox"/> 400PMH208
<input type="checkbox"/> 175PMH240	<input type="checkbox"/> 250PMH240	<input type="checkbox"/> 320PMH240	<input type="checkbox"/> 350PMH240	<input type="checkbox"/> 400PMH240
<input type="checkbox"/> 175PMH277	<input type="checkbox"/> 250PMH277	<input type="checkbox"/> 320PMH277	<input type="checkbox"/> 350PMH277	<input type="checkbox"/> 400PMH277
<input type="checkbox"/> 175PMH347	<input type="checkbox"/> 250PMH347	<input type="checkbox"/> 320PMH347	<input type="checkbox"/> 350PMH347	<input type="checkbox"/> 400PMH347
<input type="checkbox"/> 175PMH480	<input type="checkbox"/> 250PMH480	<input type="checkbox"/> 320PMH480	<input type="checkbox"/> 350PMH480	<input type="checkbox"/> 400PMH480

Lamp	ED-28 Clear	ED-28 Clear	BT-28 Clear	BT-28 Clear	ED-28 Clear
Socket	Mogul Base	Mogul Base	Mogul Base	Mogul Base	Mogul Base
ANSI Ballast	M-137	M-138	M-132, M154, M-170	M-135, M171	M-135

CAUTION: All manufacturers of metal halide lamps recommend turning them off for 15 minutes once per week when under continuous operation. This will reduce the risk of arc tube rupture at end of life. Also, color temperature may differ between manufacturers of metal halide lamps. See lamp manufacturers' specification sheets.

NOTE: Due to the Energy Independence and Security Act (EISA) of 2007, Kim Lighting can no longer supply probe start metal halide ballasts with its luminaires, effective January 1, 2009. Contact Kim Lighting for availability of replacement ballasts for warranty service claims.

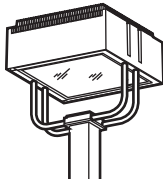
(Visit www.aboutlightingcontrols.org or the Library of Congress website for more details).

Finish Super TGIC powder coat paint over titanated zirconium conversion coating.	Color: Black Dark Bronze Light Gray Stealth Gray™ Platinum Silver White Custom Color ² Cat. No.: <input type="checkbox"/> BL <input type="checkbox"/> DB <input type="checkbox"/> LG <input type="checkbox"/> SG <input type="checkbox"/> PS <input type="checkbox"/> WH <input type="checkbox"/> CC
	² Custom colors subject to additional charges, minimum quantities and extended lead times. Consult representative. Custom color description: _____

Type:

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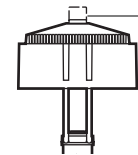


Optional Features

Photocell Control

Cat. No. **A-25**
 No Option

Factory installed receptacle in the top center of the housing. Fully gasketed, accepts NEMA base photocell (by others). Cat. No. **A-25** applies for all voltages (120V-480V).



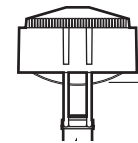
Receptacle

Convex Glass Lens

Cat. No. **CGL**
 No Option

The 3/16" thick clear convex tempered glass lens replaces the standard flat glass lens in horizontal lamp fixtures with Type II, Type III, Type IV, and Type V distributions. Provides increased lens presence and provides a subtle improvement in uniformity where pole spacing is extreme. Increases effectiveness of houseside shielding.

NOTE: Convex Lens is standard on all Vertical Lamp Optical Systems.



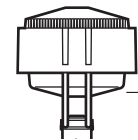
Convex Glass Lens

Polycarbonate Lens

Cat. No. **LS**
 No Option

One piece vacuum formed, clear, UV stabilized convex polycarbonate, fully gasketed, replacing the standard tempered glass lens. 250 watt maximum. May be used with 400 watt HPS in locations where ambient air temperature during fixture operation will not exceed 85°F.

CAUTION: Use only when vandalism is anticipated to be high. Useful life is limited by UV discoloration from sunlight and metal halide lamps.

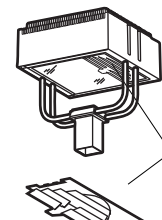


Polycarbonate Lens

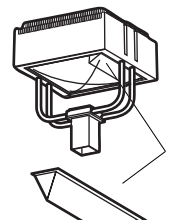
Houseside Shield

Cat. No. **(See right)**
 No Option

The cutoff horizontal reflectors are available with stamped aluminum louvers that pass streetside light and block houseside light, and a blackened panel added to the reflector to reduce houseside reflections. The vertical reflectors and horizontal reflectors with the optional convex glass lens are available with a formed aluminum shield that passes streetside light and blocks houseside light, and a black anodized panel added to the reflector to reduce houseside reflections.



HS
for flat lens



HSC
for convex lens

Cat. No.

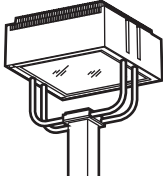
HS Recommended for use with clear lamps only. Effectiveness is reduced for coated lamps. Not for use with Type V (horizontal lamp) or symmetric (vertical lamp) light distributions.

HSC For use with all fixtures with convex glass lens. Not for use with Type V or symmetric light distributions.

Type:

Job:

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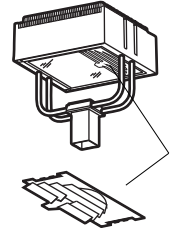
Optional Features

Neighbor Friendly Shield

- Cat. No. **NFS**
 No Option

(Type IV only) Stamped internal shield and blocking panels are used to direct and redirect lighting into a forward throw distribution. The amount of light directed and redirected toward the back of the luminaire is dramatically reduced to create extremely low glare behind the pole. Only available on the Type IV reflectors.

Neighbor Friendly Shield for **flat** lens



Fusing:

- Cat. No. **(see right)**
 No Option

High temperature fuse holders factory installed inside ballast chamber. Fuse is included.

Line Volts:	120V	208V	240V	277V	347V	480V
Cat. No.:	<input type="checkbox"/> SF	<input type="checkbox"/> DF	<input type="checkbox"/> DF	<input type="checkbox"/> SF	<input type="checkbox"/> SF	<input type="checkbox"/> DF