

kl_arfx16_spec.pdf

KIM	LIGHTING

JOB	TYPE
NOTES	ΔΡΡΡΟΥΔΙ S

FEATURES

- Independently aimed LEAR™ modules
- 355° rotation and 70° tilt module adjustment and -5° to +30° housing adjustment ■ Traditional NEMA distributions available
- Wide range of drive currents available
- Design software interface for user-defined Type X distribution creation
- IP66 sealed optical chamber

Certifications









SPECIFICATIONS



Max Weight = 51 lbs.



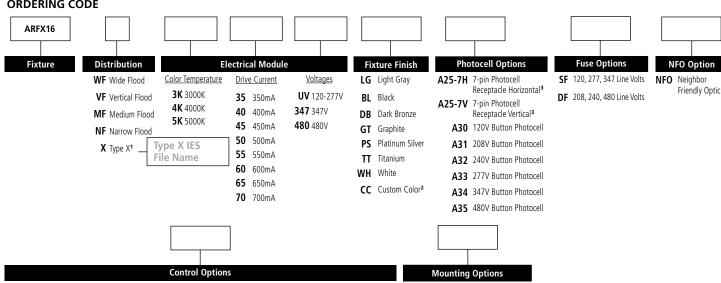
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Bottom



ORDERING CODE



<u>Wireless</u> WIR-RMI-IO 120 - 347V 1000 Foot Range WiScape RF mesh control system with off/on/dim, motion, photo, GPS location, alert, monitoring and metering capabilities.

SiteSync Lighting Control SWP^{4,5} SiteSync Wireless

Pre-Commission **SWPM**^{4,5,6} SiteSync Wireless Pre-Commission w/ Occupancy Sensor

Catalog Number

SWUSB[†] SiteSync loaded on USB flash drive (Windows® operating system only)

SWTAB[†] SiteSync Windows® based Tablet SWBRG[†] SiteSync Wireless

Bridge Node

When ordering with SiteSync, one o the following interface options must be chosen and ordered separately. Each option contains the SiteSync License, GUI and Bridge Node.

Motion

SCL-R Round Pole Mounted Occupancy Sensor up to 16'

SCL-S Square Pole Mounted Occupancy Sensor up to 16'

SCH-R Round Pole Mounted Occupancy Sensor 16' to 30'

SCH-S Square Pole Mounted Occupancy Sensor 16' to 30' SMT Surface Mount Tenon

SM2 Stanchion Mount Tenon7

WM2 Wall Mount Tenon⁷ MTM-2B Twin Mount Tenon

MTM-3E Triple Mount Tenon

For Pole Spec Select: http://www.kimlighting.com/ products/arms and poles/ For Control Spec Select: http://trpssl.com/index.html

- User-defined distributions must include IES# file where indicated
- Custom colors subject to additional charges, minimum quantites and extended lead times. Consult representative.
- ³ Indicates mounting position of fixture.
- Not available with other control or sensor options.
- Specify group and zone. See SiteSync product page www.hubbelllighting.com/controls/sitesync for more details.
- Specify time delay; dimming level and mounting height.
- ⁷ Not for use with MTM-2B or MTM-3E options.

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ARFX16 — FLOOD

Distribution Type	Photometrics (3000K)									
Field Angle - 10% max		Lumens								
	350 mA	400 mA	450 mA	500 mA	550 mA	600 mA	650 mA	700 mA		
Wide Flood	10385	11431	12305	13323	14342	15372	16403	17433		
Vertical Flood	11540	12702	13673	14804	15936	17081	18226	19371		
Medium Flood	10887	11984	12900	13968	15035	16115	17196	18276		
Narrow Flood	11503	12661	13629	14757	15885	17026	18168	19309		

Distribution Type	Photometrics (4000K)									
Field Angle - 10% max		Lumens								
	350 mA	400 mA	450 mA	500 mA	550 mA	600 mA	650 mA	700 mA		
Wide Flood	10975	12106	13306	14464	15621	16751	17882	19012		
Vertical Flood	12721	14032	15423	16765	18107	19417	20727	22037		
Medium Flood	12749	14063	15458	16802	18147	19460	20773	22086		
Narrow Flood	13250	14616	16066	17463	18860	20225	21589	22954		

Distribution Type	Photometrics (5000K)									
Field Angle - 10% max		Lumens								
	350 mA	400 mA	450 mA	500 mA	550 mA	600 mA	650 mA	700 mA		
Wide Flood	11954	13442	14930	16418	17757	19097	20437	21777		
Vertical Flood	12733	14318	15903	17488	18915	20343	21770	23197		
Medium Flood	12110	13617	15125	16632	17990	19347	20705	22062		
Narrow Flood	12867	14469	16070	17672	19114	20557	21999	23441		

ELECTRICAL CHARACTERISTICS

		Electrical Dimming																			
Optical System	Current	Current Watts Line Voltage Amps AC						Min. Power	Max THD	Dimming Range	Source current out of 0-10V purple wire		Absolute voltage range on 0-10V (+) purple wire								
		Watts	VAC	Hz	120	208	240	277	347	480	Factor	(70)	nunge	Min	Max	Min	Max				
	350 mA	110			0.92	0.53	0.46	0.40	0.32	0.23						0V	10V				
	400 mA	124			1.03	0.60	0.52	0.45	0.36	0.26			20 10% to	OmA	1mA						
	450 mA	138			1.15	0.66	0.58	0.50	0.40	0.29											
 LEAR™	500 mA	152	120 400	50/60	1.27	0.73	0.63	0.55	0.44	0.32	>0.9	20									
LEAN	550 mA	167	120-480	- 120-480	30/00	1.39	0.80	0.70	0.60	0.48	0.35	>0.9	20	100%	UIIIA	IIIIA	UV	100			
	600 mA	182				1	1		1.52	0.88	0.76	0.66	0.52	0.38							
	650 mA	196					1.63	0.94	0.82	0.71	0.56	0.41									
	700 mA	211			1.76	1.01	0.88	0.76	0.61	0.44											

TM-21 LIFETIME CALCULATION

Optical System	Ambient Environment °C	Pro	Reported L70			
Optical System	Ambient Environment C	16	26	TM-21 60	100	neported 270
LEAR™	25	97.55%	96.37%	92.45%	88.05%	> 36,000 hrs

LED COLOR

	9	pectroradiometr	ic
	3K	5K	
Designation	3000K	4000K	5000K
CRI Minimum	≥72	≥72	≥72
S/P Ratio	1.33	1.66	1.78

Kim Lighting reserves the right to change specifications without notice. Consult factory for Amber, Turtle Friendly, Gulf Coast and Observatory applications.





SPECIFICATIONS

Housing:

- Low copper aluminum alloy die-casting designed as one-piece with external cooling ribs.
- Solid cast aluminum walls between the housing and arm create a thermal barrier between the optical and electrical compartments.
- Molded silicone gaskets throughout to insure sealing between the two compartments and ingress protection.
- Housing designed with integral Type X thermal transfer "turrets" utilized for both thermal transfer and to secure location of the LEAR™ Optical Module. The turrets are spaced in rows of 4 X 4, designed to optimize photometric performance for standard and Type X user-defined distributions.
- Tempered UV coated flat lens for low glare.
- IK09 rated enclosure protects electrical equipment against external mechanical impacts.

Lens Frame:

- One-piece, die-cast, low copper aluminum alloy secured to housing with eight captive, tamper-resistant stainless steel fasteners.
- Molded silicone gasket assembles into a cast channel in the doorframe sealing the 3/16" thick low iron-content, tempered glass lens against the housing upon closure.
- IP66 certified to protect the interior components from dust and water ingress.

Type X LEAR™ Optical Module:

- Turret alignment and thermal transfer design allow for freedom of adjustability and precision of the LEAR LED array.
- Optimized standard distribution or userdefined beam patterns.
- 3000K, 4000K, 5000K standard CCT. Amber and other custom color temperatures available.
- Factory adjusted distributions created from user-defined IES files.
- Toolless 355° rotation adjustment and 70° tilt adjustment with a tamper resistant fastener.
- Type X LEAR modules are IP66 rated and utilize six high output LEDs, positioned beneath a precision, high purity molded acrylic prism.

 Targeted optics minimize pixilation concerns to provide outstanding performance, uniformity and glare control.

Electrical Components:

- Standard programmable driver for variable drive current settings from 350mA to 700mA.
- Electrical components are located in the arm.
 Molded silicon gasket seal to isolate arm from the optical chamber.
- Maximum lightning surge current 20KA with thermally protected varistor technology. Surge suppression is series circuited preventing total fixture failure.
- Open circuit fault will turn off the luminaire protecting the sensitive electronics and acting as a signal for maintenance.
- Programmable Driver is rated for -40°F starting.
- "Thermal Shield" Primary Side thermister Protection for sustainable life of LEAR modules and electronic components.

Dimming:

- Dimming range from 10% to 100% by the use of its standard 0-10V interface on the programmable driver.
- Modular wiring harness in the service area provided for user access to the dimming circuitry.
- Dimming circuitry compatible with 0-10V user-defined control devices.
- Optional factory programmed dimming profile.



Arm:

- Low copper aluminum alloy, two piece die-casting designed and gasketed to function as one-piece.
- External cooling ribs create continuous aesthetic and thermal path.
- Molded silicone gasket seals the wiring channel separating the arm from the housing thermally insulating the electronic components.

- Internally accessible slip-fitter provided. Attaches to a 1-1/4" to 2-3/8" tenon.
- Luminaire housing adjustable +30° and -5 via locking fastener under the arm cover.

Finish:

- Fade and abrasion resistant, electrostatically applied, thermally cured, triglycidal isocyanurate (TGIC) polyester powdercoat.
- Standard colors include (BL) Black, (DB) Dark Bronze, (GT) Graphite, (PS) Platinum Silver, (LG) Light Gray, (TT) Titanium, (WH) White, and (CC) Custom Color (Include RAL#).

Fuse Options:

SF for 120, 277 and 347 Line Volts **DF** for 208, 240 and 480 Line Volts.

 High temperature fuse holders factory installed inside the fixture arm. Fuse is included.

Certifications and Listings:

- UL 1598 Standard for Luminaires.
- UL 8750 Standard for Safety for Light Emitting Diode (LED) Equipment for use in Lighting Products.
- CSA C22.2#250.0 Luminaires.
- ANSI C136.31-2010 3G Vibration tested and compliant.
- RoHS compliant.
- IP66 certified.
- IEC 66262 Mechanical Impact Code IK09.

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.

WARRANTY:

 For full warranty see: http://www. hubbelllighting.com/resources/warranty





CONTROLS

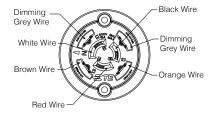
Photocell Receptacle

A25-7H or A25-7V

Fully gasketed and wired 7-pin receptacle standard. Easy access location above the electrical compartment. 7-pin construction allows user-defined interface and control definition of operational performance. ANSI twist-lock control module by-others. H (Horizontal) or V (Vertical) indicates mounting position of fixture.

Standard customer operation modes:

- 1. Tradional on/off photoelectric control.
- **2.** 5-pin wireless photoelectric control for added dimming feature.
- 7-pin wireless photoelectric control for dimming and additional I/O connections for customer use.



Button Photocell

A30 for 120V, **A31** for 208V, **A32** for 240V, **A33** for 277V, **A35** for 347V, **A34** for 480V,

Factory installed photocell inside housing with a fully gasketed sensor on the side wall. For multiple fixture mountings, one fixture is supplied with a photocell to operate the others.

Wireless Control

Hubbell Control Solutions' wiSCAPE™ In-Fixture Module is a bidirectional wireless RF device that allows an individual fixture to be managed, monitored and metered. The wiSCAPE In-Fixture Module communicates wirelessly over a robust 2.4GHz ISM (Industrial, Scientific and Medical) certified meshed radio signal. The wiSCAPE Fixture Module drastically simplifies control and automation of projects, especially in retrofit environments and challenges the legacy world of wired-systems. wiSCAPE wireless control technology adapts easily to complex automation situations for quick, simple and economical commissioning. On-Fixture Module is compatible with A-25-7H option.

WIR-RMI-IO

120 - 347V 1000 Foot Range WiScape RF mesh control system with off/on/dim, motion, photo, GPS location, alert, monitoring and metering capabilities.

SiteSvnc™1

SiteSync™ wireless control system for reduction in energy and maintenance cost while optimizing light quality 24/7. See ordering information or visit www.hubbelllighting.com/products/sitesync for more details.

Pole Mounted

Round Pole-Mounted Occupancy Sensor up to 16'

SCL-F

Round Pole-Mounted Occupancy Sensor up to 16' - an outdoor occupancy sensor with 0-10V interface dimming control that mounts directly to the pole. Wide 360° pattern. Module colors are available in Black, Gray, and White. Module is cut for round pole mounting. Pole diameter is needed upon order. Poles to be drilled in the field will be provided with installation instructions.

Ordering Example: SCL-R4²/277³/BL⁴

Square Pole-Mounted Occupancy Sensor up to 16'

SCL-S

Square Pole-Mounted Occupancy Sensor up to 16' - an outdoor occupancy sensor with 0-10V interface dimming control that mounts directly to the pole. Wide 360° pattern. Module colors are available in Black, Gray, and White. Module is cut for square pole mounting. Pole diameter is needed upon order. Poles to be drilled in the field will be provided with installation instructions.

Ordering Example: SCL-L/2773/BL4

Round Pole-Mounted Occupancy Sensor 16' to 30' SCH-R

Round Pole-Mounted Occupancy Sensor: 16' to 30' - an outdoor occupancy sensor with 0-10V interface dimming control that mounts directly to the pole. Wide 360° pattern. Module colors are available in Black, Gray, and White. Module is cut for round pole mounting. Pole diameter is

needed upon order. Poles to be drilled in the field will be provided with installation instructions.

Ordering Example: SCH-R42/2773/BL4

Square Pole-Mounted Occupancy Sensor 16' to 30'

SCH-S

Square Pole-Mounted Occupancy Sensor: 16 to 30' - an outdoor occupancy sensor with 0-10V interface dimming control that mounts directly to the pole. Wide 360° pattern. Module colors are available in Black, Gray, and White. Module is cut for round pole mounting. Pole diameter is needed upon order. Poles to be drilled in the field will be provided with installation instructions.

Ordering Example: SCH-S/2773/BL4

SCP

The SCP is a photo-control with motion sensing accessory thats mounts to the side of any new or existing 3"-5" round or square straight pole. The SCP enables any pole mounted luminaire in excess of 75 watts, to meet California Title 24 requirements with integral 20KV/10KA surge protection for added reliability and serviceability.

For more detail:

http://www.aal.net/products/sensor_control_programmable

PRECOMMISSIONED SITESYNC ORDERING INFORMATION: When ordering a fixture with the SiteSync lighting control option, additional information will be required to complete the order. The SiteSync Commissioning Form or alternate schedule information must be completed. This form includes Project location, Group information, and Operating schedules. For more detailed information please visit www.HubbellLighting.com/products/ sitesync or contact Hubbell Lighting tech support at (800) 345-4928.

SiteSync fixtures with occupancy sensor (SWPM) require the mounting height of the fixture for selection of the lens.

Examples:

SiteSync only: ARX25/1/3K35UV/PS/US/SWP

SiteSync with Motion Control: ARX25/1/3K35UV/PS/US/SWPM-20F

MOB ORDERING INFORMATION: When ordering a fixture with a dimming occupancy sensor option (MOB), please specify the appropriate information. These settings are specified in the ordering as shown in the example below.

ARX25/1/3k35UV/PS/US/MOB - 1 to 30 min - 33%or 50% - ?? / DBT

High to Dim Delay Low Level Mounting Height (ft.)

²Voltage, ³Color, ⁴Pole Diameter,

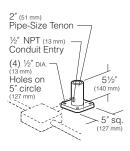




MOUNTING OPTIONS

Surface Mount Tenon SMT/BL

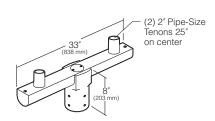
2" pipe-size tenon (2-3/8" O.D., 2" I.D.). Welded to a cast aluminum plate. Plate has four 1/2" mounting holes, and tenon has one 1/2" NPT for side conduit entry. Black finish.



Twin Mount Tenon MTM-2B/BL, MTM-2B/DB, MTM-2B/LG, MTM-2B/SG, MTM-2B/PS, MTM-2B/WH

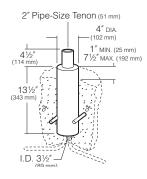
Extruded aluminum support continuously welded to a heavy cast aluminum slipfitter hub which cradles the arm for strength. The slipfitter hub contains four recessed 3/8" stainless steel allen head set point screws for mounting to steel pole with steel 2" pipe size tenon (2-3/8" O.D. x 4-1/4"). Cast aluminum end caps and center cap provide access to field splice connections.

CAUTION: Approved for mounting to poles with steel tenons only.



Stanchion Mount Tenon SM2/BL

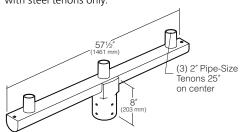
2" tenon. 4" O.D. cast low copper (<0.6% Cu) aluminum stanchion with 2" pipe-size tenon (2-3/8" O.D., 1-3/8" I.D.) for mounting a single fixture or multiple top-mounts. Black finish.



Triple Mount Tenon MTM-3E/BL, MTM-3E/DB, MTM-3E/LG, MTM-3E/SG, MTM-3E/PS, MTM-3E/WH

Extruded aluminum support continuously welded to a heavy cast aluminum slipfitter hub which cradles the arm for strength. The slipfitter hub contains four recessed 3/8" stainless steel allen head set point screws for mounting to steel pole with steel 2" pipe size tenon (2-3/8" O.D. x 4-1/4"). Cast aluminum end caps and center cap provide access to field splice connections.

CAUTION: Approved for mounting to poles with steel tenons only.



Wall Mount Tenon WM2/BL, WM2/DB, WM2/LG, WM2/SG, WM2/PS, WM2/WH

2" pipe-size tenon (2-3/8" O.D., 2" I.D.). Welded to an extruded aluminum arm with a removable end cap for wiring access. Arm is welded to a cast aluminum plate with two 1/2" mounting holes.

