

SOLID STATE AREA LIGHTING

VRSPT Series - PLED

Housing

Unitized 0.125" heavy wall aluminum construction. Upper side vents are protected with perforated aluminum panels. Side vents and bottom lens frame vents provide passive and forced convective cooling of the PLED™ module. Internal driver compartment is gasketed and sealed.

PLED™ Optical Module

Emitters (LED's) are arrayed on a metal core PCB panel with each emitter located on a copper thermal transfer pad and enclosed by an LED refractor. LED optics completely seal each individual emitter to meet an IP66 rating. In asymmetric distributions, a micro-reflector inside the refractor re-directs the house side emitter output towards the street side and functions as a house side shielding element. Refractors are injection molded H12 acrylic. Each LED refractor is sealed to the PCB over an emitter and all refractors are retained by an aluminum frame. Any one Panel, or group of Panels in a luminaire, have the same optical pattern. LED refractors produce standard site/area distributions. Panels are field replaceable and field rotatable in 90° increments.

LED driver(s)

Constant current electronic with a power factor of >.90 and a minimum operating temperature of -40°F/-40°C. Driver(s) is/are UL and cUL recognized and mounted directly against the Electrical Housing to facilitate thermal transfer, held down by universal clamps to facilitate easy removal. In-line terminal blocks facilitate wiring between the driver and optical arrays. Drivers accept an input of 120-277V, 50/60Hz or 347V-480V, 50,60Hz. (0 - 10V dimmable driver is standard. Driver has a minimum of 3KV internal surge protection. Luminaire supplied with 20KV surge protector for field accessible installation.)

LED Emitters

High output LED's are utilized with drive currents ranging from 350mA to 1050mA. 70CRI Minimum. LED's are available in standard Neutral White (4000K), or optional Cool White (5000K) or Warm White (3000K). Consult Factory for other LED options.

Amber LED's

PCA (Phosphor Converted Amber) LED's utilize phosphors to create color output similar to LPS lamps and have a slight output in the blue spectral bandwidth. TRA (True Amber) LED's utilize material that emits light in the amber spectral bandwidth only without the use of phosphors.

Post Top Mounting

Four (4) 1" Square extruded aluminum arms welded to a cast aluminum pole top fitter. Arm assembly is mechanically attached to twin castings welded to either side of the housing.

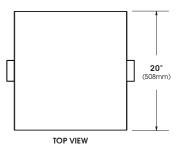
Finish

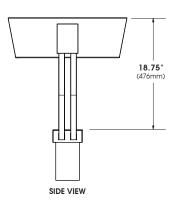
Super TGIC polyester powder coating is applied onto a metal substrate this has been pretreated with a four-stage process for maximum adhesion and color retention. The top coat is baked at 400° F for maximum hardness and exterior durability.

PROJECT NAME:

FIXTURE TYPE:









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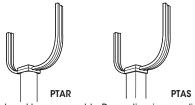


VRSPT Series - PLED



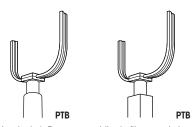
SPECIFICATIONS

Mounting Styles



Internal tenon assembly, Decorative ring supplied for 6" dia. and all SQ. poles.

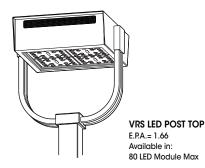
PTAR4 - To fit inside 4" Round pole. PTAR5 - To fit inside 5" Round pole. PTAR6 - To fit inside 6" Round pole. PTAS4 - To fit inside 4" Square pole.
PTAS5 - To fit inside 5" Square pole.
PTAS6 - To fit inside 6" Square pole.
For any other size poles, please consult factory.



Luminaire's Tenon assemblies to fit over pole tenons ranging from $2^3/8^\circ$ to $2^7/8^\circ$ O.D. x 4" long For any other pole tenon sizes, please consult factory.

PTB27 - To fit over $2^7/8$ " O.D. tenon. (standard) PTB23 - To fit over $2^3/8$ " O.D. tenon.

PLED™ Modules





OPDERING INFORMATION

CKDEKING	INFORMATION		,	Spec/Order Example: VRS-LED/PLED-II-FR/40LED-350mA/CW/PTB/1/9005-S						
Model	Optics	L	LED		Mounting	Finish	Options			
Luminaire	Optics	LI	D	Voltage	Mounting	Finish	Options			
□ VRS PLED PT	PLED** Distribution Type II PLED-II Type II Front Row PLED-II-FR Type II Median Illuminator PLED-II-ML Type III Med. PLED-III-M Type III Wide PLED-III-W Type IV PLED-IV-FT Type V Narrow PLED-VSQ-N Type V Med. PLED-V-SQ-M Type V Wide PLED-V-SQ-W	Color Temp-CCT NW (4000K)* *STANDARD CW (5000K) WW (3000K) Other LED Colors available consult Factory NOTES: 3 - 700mA and 1050mA n LED's	nave no definable	□ UNV (120-277) □ 347 □ 480	PTAR4 PTAR5 PTAR6 PTAS4 PTAS5 PTAS6 PTAS6 PTAS6 PTAS6 PTB23 (To fit 2 3/8* O.D.) PTB27 (To fit 2 7/8* O.D.) PTB27 swill fit a max 4* tall tenon, if taller, please consult factory. See USALTG.COM for additional arm styles	Standard Textured Finish Black 9005-T White 9003-T Grey 7004-T Dark Bronze 8019-T Green 6005-T Premium Finishes Rust Patina Copper PC For smooth finish replace suffix "1" with suffix "5" (Example: 9500-S) Consult factor for custom colors		HLSW HS-PLED PC+V TPR TPR7 SF DF cible MS-F311		





LED COUNT	SOURCE TYPE	SOURCE	INITIAL LUMENS - 4000K	INITIAL LUMENS - 3000K	INITIAL LUMENS - 5000K	L70 GREATER THAN (HR)	STARTING TEMP.	SYSTEM WATTS	VOLTS	MAX INPUT AMPS
40	LED	40 PLED Optical Module - 350mA	5,585 - 6,408	5,306 - 6,088	5,864 - 6,729	60,000+	-20°F	43	120 277	0.38 0.17
40	LED	40 PLED [®] Optical Module - 525mA	8,059 - 9,246	7,656 - 8,784	8,462 - 9,709	60,000+	-20°F	65	120 277	0.55 0.24
40	LED	40 PLED® Optical Module - 700mA	10,240 - 11,749	9,728 - 11,162	10,752 - 12,337	54,000+	-20°F	87	120 277	0.73 0.32
40	LED	40 PLED® Optical Module - 1050mA	13,642 - 15,652	12,960 - 14,870	14,324 - 16,435	60,000+	-20°F	128 _	120 277	1.12 0.49
80	LED	80 PLED [®] Optical Module - 350mA	10,824 - 12,419	10,283 - 11,798	11,365 - 13,040	60,000+	-20°F	86	120 277	0.75 0.33
80	LED	80 PLED [®] Optical Module - 525mA	15,587 - 17,884	14,808 - 16,990	16,366 - 18,778	60,000+	-20°F	130 _	120 277	1.10 0.48
80	LED	80 PLED° Optical Module - 700mA	19,767 - 22,680	18,779- 21,546	20,755 - 23,814	60,000+	-20°F	174 _	120 277	1.45 0.63
80	LED	80 PLED [®] Optical Module - 1050mA	26,255 - 30,124	24,942 - 28,618	27,568 - 31,630	60,000+	-20°F	257 _	120 277	2.23 0.96

NOTES:

- 1. Max Input Amps is the highest of starting, operating, or open circuit currents
- ${\bf 2}.$ Lumen values for LED Modules vary according to the distribution type
- 3. System Watts includes the source watts and all driver components.
- 4. Fuse value should be sufficient to protect all wiring components. For electronic driver and LED component protection, use 10KV 20KV surge suppressors.
- 5. L70(9K) TM-21 6x rule applied

WARNING: All fixtures must be installed in accordance with local codes or the National Electrical Code. Failure to do so may result in serious personal injury.





SOLID STATE AREA LIGHTING

VRSPT Series - VLED

Housing

Unitized 0.125" heavy wall aluminum construction. Upper side vents are protected with perforated aluminum panels. Side vents and bottom lens frame vents provide passive and forced convective cooling of the **VLED**° module. Internal driver compartment is gasketed and sealed.

VLED Optics

Low copper A356 alloy (<.2% copper) cast aluminum housing. Integrated clear tempered glass lens sealed with a continuous silicone gasket protects emitters (LED's) and emitter Reflector-Prism optics, and seals the module from water intrusion and environmental contaminants. Module is sealed to meet an IP67 rating. Each emitter is optically controlled by a Reflector-Prism injection molded from H12 acrylic (3 types per module; one from 0° -50°; one from 50° - 65°; one from 65° - 72°). Each Reflector-Prism has indexing pins for aiming and is secured to an optical plate made of matte black anodized aluminum. The optical plate locates every Reflector-Prism over an emitter. Reflector-Prisms are secured to the optical plate with a UV curing adhesive. The Reflector-Prisms are arrayed to produce IES Type II, III, IV, and V-SQ distributions. The entire Optical Module is field rotatable in 90° increments. Both module and drivers are factory wired using water resistant, insulated cord.

LED Driver

Drivers are UL and cUL recognized mounted on a single plate and factory prewired with quick-disconnect plugs. Constant current driver is electronic and has a power factor of >0.90 and a minimum operating temperature of -40°F. Drivers accept an input of 120-277V, 50/60Hz or 347-480V, 50/60Hz. (0 - 10V dimmable driver is standard. Driver has a minimum of 3KV internal surge protection. Luminaire supplied with 20KV surge protector for field accessible installation.)

LED Emitters

High output LED's are utilized with drive currents ranging from 350mA to 1050mA. 70CRI Minimum. LED's are available in standard Neutral White (4000K), or optional Cool White (5000K) or Warm White (3000K). Consult Factory for other LED options.

Mountings

Post Top Arms - Four (4) 1" Square extruded aluminum arms welded to a cast aluminum pole top fitter. Arm assembly is mechanically attached to castings welded to either side of the

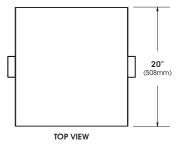
Wall - Heavy wall extruded aluminum arm with draw bolts integrates with a cast aluminum wall plate and mounting bracket.

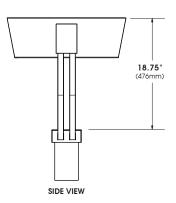
Canopy - Standard 1" high cast aluminum mounting plate with central wireway or 2" high heavy gauge wire box with 3/4" conduit knockouts on each side.

Super TGIC polyester powder coating is applied onto a metal substrate this has been pretreated with a four-stage process for maximum adhesion and color retention. The top coat is baked at 400° F for maximum hardness and exterior durability.

FIXTURE TYPE:











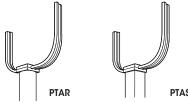
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SPECIFICATIONS

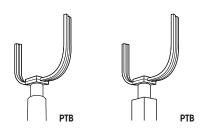
Mounting Styles



Internal tenon assembly, Decorative ring supplied for 6" dia. and all SQ. poles.

PTAR4 - To fit inside 4" Round pole. PTAR5 - To fit inside 5" Round pole. PTAR6 - To fit inside 6" Round pole.

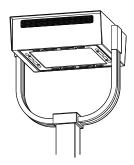
PTAS4 - To fit inside 4" Square pole. PTAS5 - To fit inside 5" Square pole. PTAS6 - To fit inside 6" Square pole. For any other size poles, please consult factory.



Luminaire's Tenon assemblies to fit over pole tenons ranging from $2^3/8$ " to $2^7/8$ " O.D. x 4" long For any other pole tenon sizes, please consult factory.

PTB27 - To fit over $2^7/8$ " O.D. tenon. (standard) **PTB23** - To fit over $2^3/8$ " O.D. tenon.

VLED™ Modules





120 LED Module

VRS VLED POST TOP E.P.A.= 1.66 Available in: 120, 80, 64 &48 LED Module

ORDERING INFORMATION

Spec/Order Example: VRS LED PT/VLED-IV/48LED 700mA-CW 120/PTB/8019-S

Model	Optics	Optics LED		Mounting	Finish	Options			
Luminaire	Optics LED V		Voltage	Mounting	Finish	Options			
□ VRS LED PT	TYPE II VLED-III TYPE III VLED-III TYPE IV VLED-IV TYPE V VLED-V-SQ	No. LEDs Drive Current 120LED¹	□ UNV (120-277) □ 347 □ 480	PTAR4 PTAR5 PTAR6 PTAS4 PTAS5 PTAS5 PTAS6 PTB23 (To fit 2 3/8" O.D.) PTB27 (To fit 2 7/8" O.D.) PTB9 If a mox 4" toll tenon, if toller, please consult factory. See USALTG-COM for additional arm styles	Standard Textured Finish Black 9005-T White 9003-T Grey 7004-T Dark Bronze 8019-T Green 6005-T Premium Finishes Rust Patina Copper PC For smooth finish replace suffix "7" with suffix "5" (Example: 9500-S) Consult factor for custom colors	High-low dimming for hardwired switching or nonintegrated Motion Sensor HLSW internal House Side Shield HS External House Side Shield EHS Photo Cell + Voltage (Example: PC120V) Twist Lock Receptacle only TPR 7-Pin Twist Lock Receptacle only Single Fuse (120V, 277V, 347V) Single Fuse (208V, 240V, 480V) Step Dim Motion Sensor (Programmed 50/100) Blue-Tooth programmable Photo/Motion Sensor (Factory - Motion 50/100; MS-F311 Photo 75fc)			





LED COUNT	SOURCE TYPE	SOURCE	INITIAL LUMENS - 4000K	INITIAL LUMENS - 3000K	INITIAL LUMENS - 5000K	L70 GREATER THAN (HR)	STARTING TEMP.	SYSTEM WATTS	VOLTS	MAX INPUT AMPS
48 LED	LED	48 / LED Optical	5,664 -	5,381 -	5,947 -	60,000+	-20°F	53	120	0.45
		Module - 350mA	6,022	5,721	6,323				277	0.20
									347	0.16
48	LED	48 VLED Optical	7,799 -	7,409 -	8,189 -	60,000+	-20°F	77 _	120	0.65
		Module - 525mA	8,292	7,877	8,707			_	277	0.26
									347	0.23
48	LED	48 VLED Optical	9,765 -	9,277 -	10,253 -	60,000+	-20°F	103	120	0.86
		Module - 700mA	10,382	9,863	10,901			_	277	0.38
									347	0.30
64	LED	64 VLED ° Optical	7,552 -	7,174 -	7,930 -	60,000+	-20°F	71	120	0.60
		Module - 350mA	8,030	7,629	8,432			_	277	0.26
									347	0.21
64	LED	64 VLED ° Optical	10,399 -	9,879 -	10,919 -	60,000+	-20°F	102	120	0.85
		Module - 525mA	11,057	10,504	11610			_	277	0.37
									347	0.30
64	LED	64 VLED Optical	12,111 -	11,505 -	12,717 -	60,000+	-20°F	138	120	1.15
		Module - 700mA	12,693	12,058	13,328				277	0.50
									347	0.40
80	LED	80 VLED ° Optical	8,883 -	8,439 -	9,327 -	60,000+	-20°F	87	120	0.73
		Module - 350mA	9,445	8,973	9,917			_	277	0.33
									347	0.26
80	LED	80 VLED ° Optical	12,110 -	11,505 -	12,716 -	60,000+	-20°F	130	120	1.09
		Module - 525mA	12,876	12,232	13,520				277	0.47
									347	0.38
80	LED	80 VLED Optical	15,138 -	14,381 -	15,895 -	60,000+	-20°F	173	120	1.45
		Module - 700mA	15,866	15,073	16,659			_	277	0.63
									347	0.50
100	LED	120 VLED Optical	10,812 -	10,271 -	11,353 -	60,000+	-20°F	110	120	0.92
		Module - 350mA	11,297	10,732	11,862			_	277	0.40
									347	0.32
100 L	LED	120 VLED Optical	14,958 -	14,210 -	15,706 -	60,000+	-20°F	160	120	1.34
		Module - 525mA	15,632	14,850	16,414			_	277	0.58
									347	0.47
120	LED	120 / LED ° Optical	12,973 -	12,324 -	13,622 -	60,000+	-20°F	129	120	1.08
		Module - 350mA	13,557	12,879	14,235				277	0.47
									347	0.38
120	LED	120 √LED ° Optical	17,950 -	17,053 -	18,848 -	60,000+	-20°F	192	120	1.60
		Module - 525mA	18,758	17,820						

NOTES:

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- 3. System Watts includes the source watts and all driver components.
- Fuse value should be sufficient to protect all wiring components. For electronic driver and LED component protection, use 10KV 20KV surge suppressors.
- 5. L70(9K) TM-21 6x rule applied

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