energybank® model T LED

Date:	
Type:	
Firm:	
Project:	

Reduce wattage up to 80%

A model T using 600W with its best-in-class light engines can replace ***two*** traditional 1000W metal halide fixtures that use more than 2300W. Single, Double, Triple or Quad fixture replacement.

model T light engines are designed to deliver exceptional, high-lumen output with precise proprietary optics for your specific application.

model T is a low profile fixture that features a sleek, contemporary compact form factor with minimal EPA wind load factor.

Constructed of galvanneal with a durable, automotive grade exterior finish. Bronze, Black, Gray and White are standard. Custom colors and finishes are available.

Logo options available to further enhance your branding.

Patent-pending Pinnacle™ universal mounting system application engineered for fast, secure unobtrusive mounting onto virtually any type of existing pole.

Patents-pending Forced Vector Cooling™ and RPM™ remote power module provide thermal protection for components for significantly longer life and superior lumen output.

model T 600W
(2000W HID equivalent)

SENSOR INCLUDED

remote control available to reprogram standby motion sensor settings

	MT600	MT300
DESCRIPTION	NOMINAL WATTAGE	
Turbo when motion	600W	300W
Standby after motion	400W	150W
NightLight	200W	150W
Time on Turbo after last motion	15 mins	15 mins

CUSTOM LOGO*

One side or both of fixture

One side or both of V Base

Side of fixture and V Base

** Specify logo placement. Submit logo in .ai or .eps format*

STANDARD COLORS

bronze

black

gray

white

ORDERING INFO

Use this tool to determine part number* for placing order.

Lead times will vary depending on options selected. Consult your sales representative.

EXAMPLE: MT600-UNFD-HMBZ-MSCN-PV

Application	Wattage	Voltage	Optics Lens	Reflector	Fixture Color	Motion Sensor	Customization	Mounting
MT: model T	**30:** 300W **60:** 600W	**UN:** 120-277V	**FD:** forward throw **CD:** bi-directional	**HM:** Hammertone	**BZ:** bronze **GR:** gray **BL:** black **WH:** white	**MSC:** Wattstopper	**N:** None **L:** Logo	**PV:** Pinnacle V-Base **TV:** Tenon V-Base

One central photoeye required at building or panel for fixture to turn off

**For additional custom options, call your sales representative for details.*

model T LED

STANDARD SPECIFICATIONS:

	spec	model T 300W	model T 600W
performance	color temperature	5000K	
	CRI	84	
	lumens	30,000	60,000
	lifetime	100,000 hours	
electrical	power consumption	300W (nominal)	600W (nominal)
	input voltage	120 - 277 V	
	surge suppression	integrated transient voltage protection	
	power supply	hardwire	
physical	dimensions (L"xH"xW")	64.126" L 18.125" H 8.513" W	
	weight	81 lbs	
	housing	welded galvaneal with durable, architectural grade exterior finish.	
	optics	Type III forward-throw or Type V bi-directional, borosilicate glass lens	
	mounting	Pinnacle™ Mounting or bullhorn	
	operating temperature	- 40° C to 55° C	
	color	black, white, gray, bronze *optional* custom colors and custom logos	
application	certification	UL Listed DLC QPL Listed dark-sky compliant	
	environment	CSA rated for wet conditions UL wet listed.	
	warranty	Limited 5-year standard	
	EPA	3.0 ft²	
	motion	Digital control with Motion and programmable high/low set points	
DLC*	DLC Agency Reference #		MT600-UNCD-HMxx MT600-UNFD-HMxx

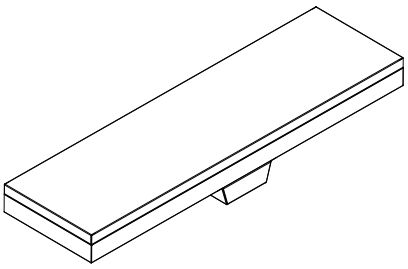
**Not all models and wattages listed. Please consult DLC QPL for additional listings.*

OSRAM

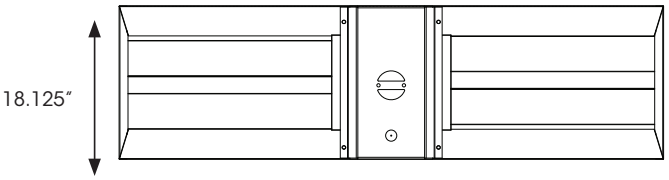
Warranty: 5-year standard limited warranty from OEM on all light engine components.

Designed and manufactured in USA

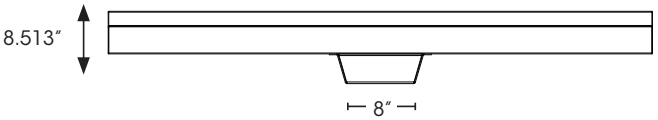
L 64.126 in
H 8.513 in
W 18.125 in
81 lbs



Top view



Bottom view



Front view

81 lbs
Complete model T fixture with V-base mount

MOUNTING BRACKETS

Pinnacle V Base (PV): fits on any square, round or tapered pole 4"- 7"

Tenon V Base* (TV): fits on any square or round pole with standard 2 3/8" tenon

**Concrete poles require a Tenon V Base*

NOTE: Replacing 4,000 watts on a single pole requires an additional mounting bullhorn.

Bullhorn (BH): fits two (2) standard model T fixtures on any square or round pole 4"- 6"

Tenon Bullhorn (TB): fits two (2) standard model T fixtures on any square or round pole with standard 2 3/8" tenon

Light Engine Specifications – Driver

ELECTRICAL SPECIFICATIONS		
Input		
Input Voltage (VAC)	120V-277V (+/- 10%)	
Frequency Range (Hz)	50 – 60 Hz (+/- 10%)	
	120V	**277V**
Input Current (A)	1.7	0.75
THD @ Full load	<15%	<20%
Power Factor @ Full load	>0.95	>0.95
Efficiency @ Full load	≥88%	≥90%
Inrush Current (A_{pk})	44A, 190 µs	131A,190µs
Output		
Output Current (mA)	600-1250mA 1mA resolution (programmable)	
Output Voltage (VDC)	70-210VDC	
Output Ripple Current	<30% @ 1250mA	
Max. Output power (W)	180W (model dependent)	
LED Power-up time	< 0.5sec	
Load Regulation	<5%	
Line Regulation	<5%	
Over voltage protection	Yes, non- latching	
Over load protection	Power fold back @185W	
Output short-circuit protection	Yes, non- latching	

GENERAL INFORMATION	
Item Number	79367
Type	Constant Current
Output Power	180W (Max.)

ENVIRONMENTAL SPECIFICATIONS	
Ambient Operating Temperature	-40 ºC to 55 ºC
Case Temperature (Tc)	85ºC** 90°C (max)
Max. Storage Temp.	70ºC
Max. Relative Humidity (%)	95% non condensing
Transient Protection	ANSI C62.41 Cat.B 6.0kV
IP Rating	IP66
UL Environmental Rating	Damp & Wet
UL File number	E320395
EMI Compliance	FCC Part 15 Class A
Sound Rating	Class A

- Warranty applicable only at 85ºC

Photometry

- model T 600W
- 60,000 Lumens
- 100 Lumens/watt (nominal)
- 5000K Color Corrected Temperature
- 84 CRI
- 100,000 hour operating life

Light Engine Specifications - LED

Absolute Maximum Ratings

Item	Symbol	Absolute Maximum Rating	Unit
Forward Current	I_F	900	mA
Pulse Forward Current	I_{FP}	1350	mA
Allowable Reverse Current	I_R	85	mA
Power Dissipation	P_D	35.1	W
Operating Temperature	T_{opr}	-40~105	°C
Storage Temperature	T_{stg}	-40~100	°C
Junction Temperature	T_J	140	°C

* Absolute Maximum Ratings at T_C=25°C.
* I_{FP} conditions with pulse width ≤10ms and duty cycle ≤10%.
* The operating Temperature (T_{opr}) range is the range of case temperatures.

Light Engine Specifications - LED Reliability

Tests and Results

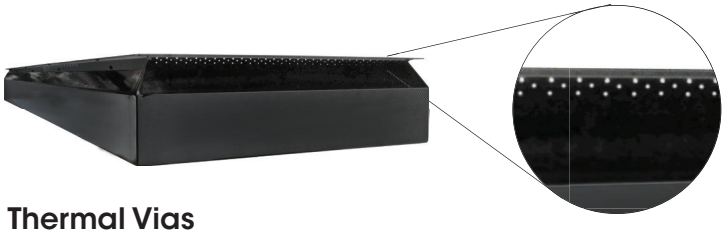
Test	Reference Standard	Test Conditions	Test Duration	Failure Criteria #	Units Failed/Tested
Temperature Cycle	JEITA ED-4701 100 105	-40°C(30min)~25°C(5min)~ 100°C(30min)~25°C(5min)	100cycles	#1	0/10
High Temperature Storage	JEITA ED-4701 200 201	T_A=100°C	1000hours	#1	0/10
Temperature Humidity Storage	JEITA ED-4701 100 103	T_A=60°C, RH=90%	1000hours	#1	0/10
Low Temperature Storage	JEITA ED-4701 200 202	T_A=-40°C	1000hours	#1	0/10
High Temperature Operating Life		T_C=72°C, I_F=900mA	1000hours	#1	0/10
Electrostatic Discharges	JEITA ED-4701 300 304	HBM, 2kV, 1.5kΩ, 100pF, 3pulses, alternately positive or negative		#1	0/10

NOTES:
Measurements are performed after allowing the LEDs to return to room temperature.

model T LED

Thermal Bridge™

Optimizes thermal load transfer from light engines to forced vector air flows that are directed to Thermal Vias

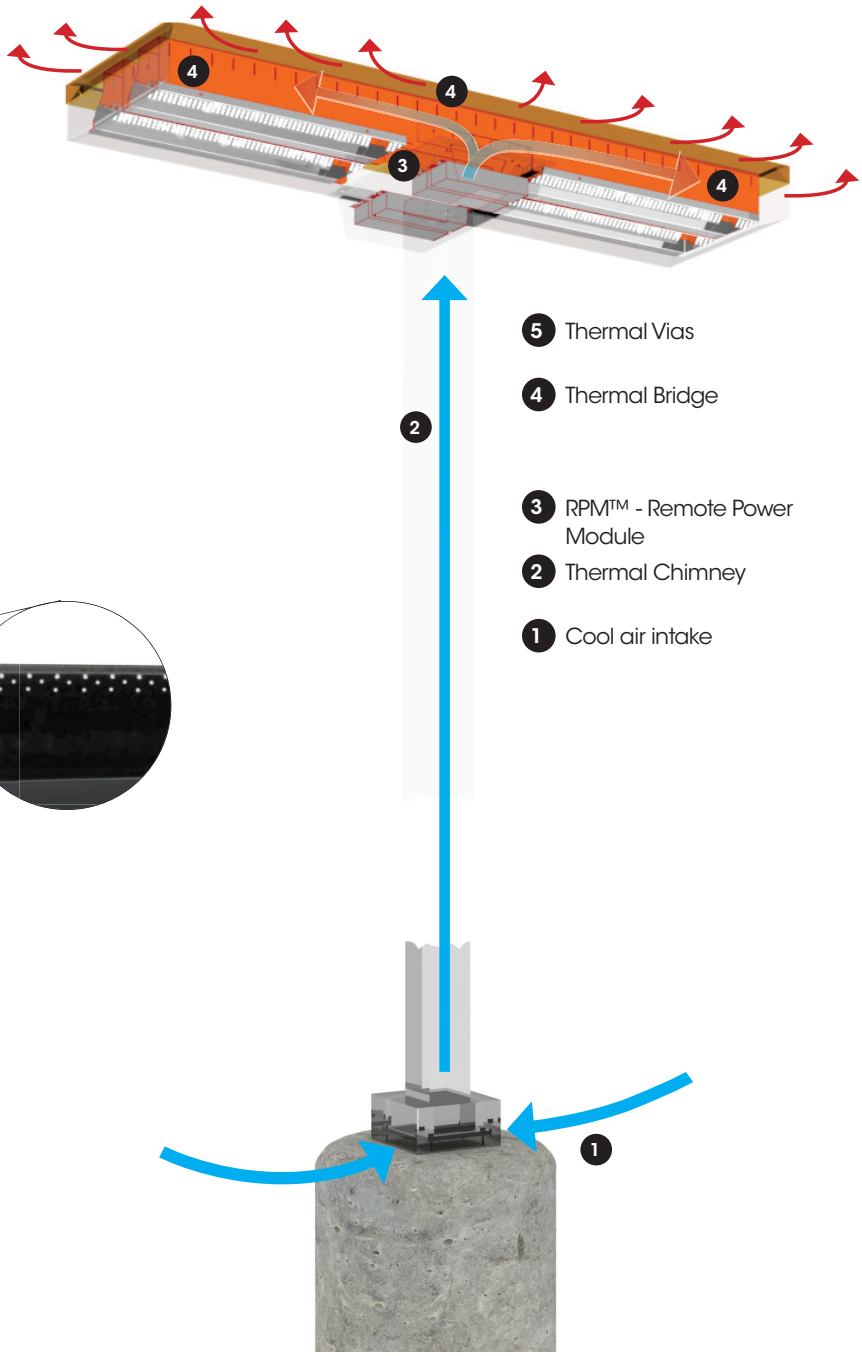


Thermal Vias

- Precisely located, perfectly sized openings allow warm air to exit the fixture
- Insect proof - similar in size to a window screen
- Enhances natural aspiration of the thermal flow
- Shielded from elements by fixture cover

RPM™ Remote Power Module

- Enhances fixture efficiency by keeping driver thermal load away from the light engines
- 6kV Transient Voltage Protection
- Quick change connectors



Naturally Aspirated Forced Vector Cooling®

Heated air is less dense than cool air and rises up and out of the Thermal Vias at the top of the fixture pan.

This draws in cool air from both the conduit lines located below ground and through the pole mounting base.

That cooler forced vector air passes over the drivers in the RPM, LED light engines and the Thermal Bridge – keeping those components cooler.