Lighting Solutions TOUGH ENOUGH for PAPER MILLS - TISSUE MILLS - PAPER CONVERTERS

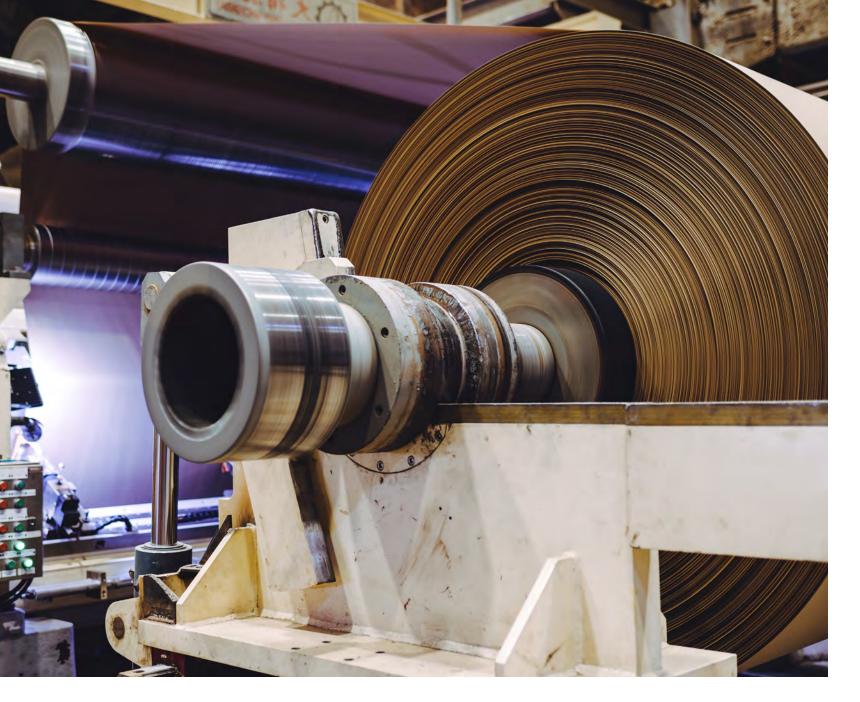






Tactik Lighting, LLC

tactiklighting.com



INTRODUCTION

In the paper mill industry, lighting is crucial for operational efficiency and safety. However, the high heat, humidity, and dust present significant challenges. These conditions can quickly degrade traditional and advanced LED lighting. Ideal lighting must offer energy efficiency and withstand harsh environments.

Recognizing these challenges, Tactik addresses the need for durable, efficient lighting solutions in paper mills. Dissatisfied with poorly made overseas products, American businesses demand superior quality. In response, we innovate and deliver lighting that embodies American craftsmanship. Our solutions are rigorously tested to ensure they meet the highest standards. Tactik's products offer energy efficiency, durability, and reliability against temperature extremes, moisture, dust, and corrosive vapors. We are dedicated to solving the paper mill industry's unique problems, ensuring our lighting solutions exceed expectations and enhance productivity and safety. By prioritizing innovation and quality, we aim to set a new standard in industrial lighting. Join us in our mission to illuminate the future of the paper mill industry.

LEDS MADE FOR THE REAL WORLD — YOUR WORLD.

In theory, LED lighting is supposed to offer significantly improved energy efficiency compared to more traditional commercial and industrial lighting. In reality, environmental factors – including temperature, dust, grit, vibration, moisture and corrosive vapors – can degrade LED performance and reliability rapidly. As a result, American businesses have become increasingly frustrated with all the cheaply designed-and-made products from overseas. You demanded better. We delivered.



DESIGNED & MANUFACTURED IN COLLABORATION WITH TISSUE MILL FROM GREEN BAY, WI

Designed and built to a higher standard to deliver the performance, reliability and energy savings you expect from LEDs.

- > Built-In Protection includes seals and gaskets to keep contaminants out
- > Added Reliability and consistency of performance thanks to transient voltage surge suppression
- > Added Durability of best-in-class branded drivers with soldered wires
- > Extended Life due to low LED and driver running temperatures results in the lowest life cycle costs of any industrial-grade LED lighting

KEEP YOUR COOL WITH REMOTE DRIVERS.

Most Tactik lights utilize remote drivers to prevent unwanted heat build-up inside the fixture, which can degrade performance and is a leading cause of premature fixture failure.



Remote drivers also offer added flexibility, allowing you to easily and economically adjust your lighting to evolving plant floor needs – without costly and time-consuming re-gridding.





TACTIK LABS IS YOUR ADDED ASSURANCE OF RELIABILITY
Our LED lighting is designed to a higher standard. So is our validation process.

At our in-house lab testing facility, our products undergo rigorous testing to provide you every assurance possible that all Tactik LED lighting will perform and last as promised.

While others may talk about performance and reliability in harsh environments, Tactik Labs documents it.

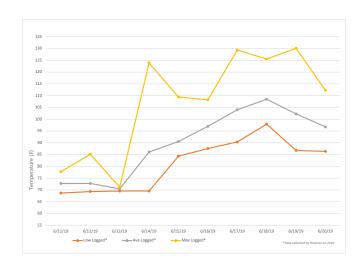
Temperature extremes – and even heat build-up. Check.

The ability to effectively resist the effects of dust, grit, moisture and corrosive gases. Check.

Because we want to help you make the best-informed

decisions possible regarding your LED lighting choices, we also test leading competitors' units. That way, you can see how our Military-Grade LED Lighting stacks up against the competition in side-by-side comparisons.

Through thousands of installations over 10 years in business, and through years of testing, including 3rd party UL and DLC testing, we've learned a lot. And we look forward to sharing what we've learned with you. After all, the integrity of your LED lighting and the company that manufactures it matters. You have our word on it.



EXTREME TEMPERATURE TESTING



CORROSIVE TESTING AND MORE

VETERAN OWNED COMPANY DEDICATED TO PRODUCTS THAT ARE PAPER/TISSUE MILL GRADE TOUGH

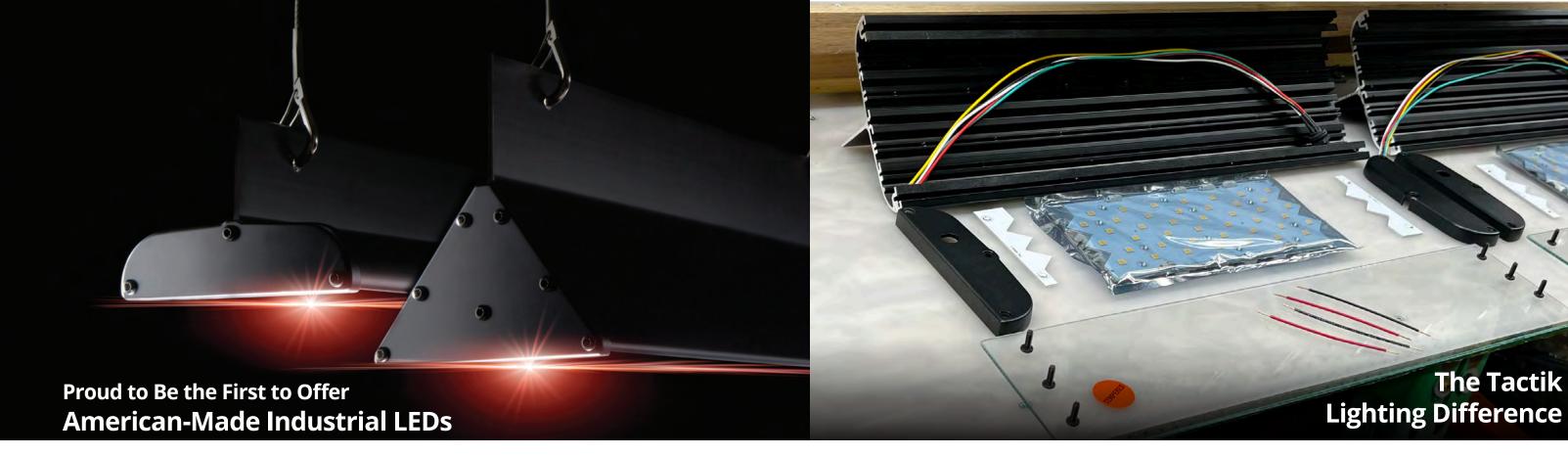
Tactik Lighting CEO and Lead Energy Expert Tim Wasmer, a U.S. Army veteran, makes sure that our "failure is not an option" mindset permeates the entire company. We are far more than just LED lighting engineers. We're passionately committed to being the team our clients depend on for the right energy efficiency solutions for their businesses. On time. Within budget. Delivering results as promised.

HOW DO OUR PRODUCTS HOLD UP?

The team at Tactik Lighting put our military-grade light fixtures to the test. They held up - under the weight of a 5800 lb jeep! That is the strength and durability you can expect from all of the products manufactured and sold by Tactik Lighting.









INTRODUCING LED LIGHTING MADE IN AMERICA'S HEARTLAND

Our latest generation of Paper/Tissue-Grade LED lighting includes fixtures made right here in America. Now, you can get American made quality and craftsmanship that you can see and feel. What you won't see is import tariffs tacked onto your fixture price tag.

PATENT-PENDING DESIGNS REDEFINE HEAT DISSIPATION

Our NCO and Citadel Series feature an innovative, vertical exterior heat transfer cooling fin to dissipate heat while preventing dust and debris build-up. In addition, internal heat transfer cooling fins are protected against dust and debris build-up for improved cooling efficiency over the life of the fixture. These designs look different because they are different.

HIGHER HEAT RATINGS MEAN LONGER LIFE

Our high-heat rated units now feature up to a 30% increase in heat threshold compared to our leading competitors.

What's more, unlike our competitors that experience up to a 45% fall-off in lumen output as they reach their high-heat rating, our fixtures have no such fall -off.

FAST 2-3 WEEK LEAD TIMES

Leading-edge, modular design and advanced manufacturing capabilities allow us to ship orders, even custom orders– in less time.

And all our products are backed by industry-leading warranties for added peace of mind.



Put it all together and you start to see the real value of lighting made in America specifically for American business.

TACTIK LIGHTING'S "BUY IT ONCE" NO OBSOLESCENCE PHILOSOPHY

At Tactik Lighting we believe in continuous innovation and market disruption. One innovative initiative is our "Buy it Once" philosophy. With Tactik's Refurbishment program, any product out



of warranty and at the end of its expected life can be returned to the factory for reconditioning.

Our products are designed and built to last long after our competitors products have failed, but eventually they will

need to be replaced. If you have ever been in a situation where a few fixtures have failed, only to find they have been discontinued or redesigned so that replacements will not match the existing array, this can be incredibly frustrating. With Tactik Lighting products, that frustration will be a thing of the past.

Tactik's Refurbishment program includes new wearable parts such as LED boards, drivers and transient voltage suppressors. Non wearable parts, such as housings and mounting are reconditioned and a virtually new and updated product is returned, at a much lower price, and with a full 10 year warranty. They will also match your existing fixtures.

No one knows what advancements will be made in

LED technology 10 years from now. But our non obsolescence policy promises to maintain state of the art technology, in the same form factor, while promoting sustainability.





Challenges in Paper Mills

Paper mills face four clear issues related to properly lighting and running their mills.

1 DUST ABATEMENT

PROBLEM:

Dust accumulation in paper mills significantly impacts the efficiency and longevity of lighting fixtures, leading to overheating and reduced operational lifespan. Additionally, regular cleaning diverts valuable staff time from primary duties within the mill.

SOLUTION:

The Citadel by Tactik **resists dust buildup**, ensuring fixtures stay clean and operational longer. Built with American-made quality, it outlasts conventional lighting fixtures. This allows mill owners to focus on essential operations, reducing maintenance and optimizing productivity.



CITADEL FIXTURE:



VS. COMPETITORS:



Holds up to **0.25lbs** of dust



Holds up to **2.25lbs** of dust



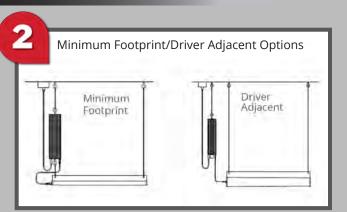
INACCESSIBILITY & DAISY CHAINS

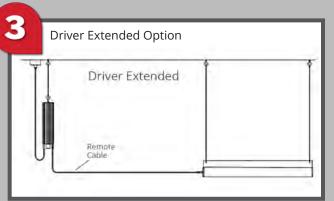
PROBLEM:

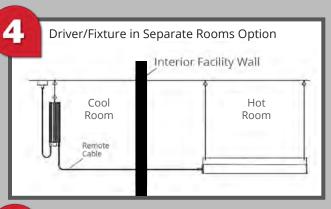
Accessing lighting fixtures for maintenance or replacement in the high, intricate spaces of paper mills poses significant challenges. These areas are often hard to reach, requiring special equipment or causing downtime during maintenance activities.

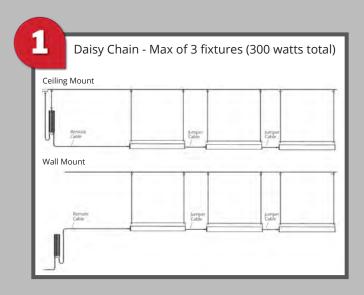
SOLUTION:

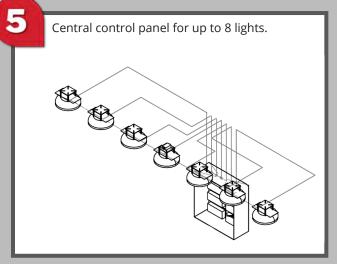
The Citadel lighting system is uniquely designed with a remote driver feature, significantly enhancing accessibility within paper mills. This innovation allows for easier and more efficient maintenance from safer, more accessible locations. By eliminating the need for frequent ladder climbs or machinery shutdowns, paper mill owners can maintain high productivity levels while ensuring that lighting fixtures are always operating at peak efficiency.











SAFETY AND QUALITY - NO FLICKER

PROBLEM:

In the demanding setting of paper mills, maintaining high visibility is crucial for operational safety and efficiency. Workers often struggle with poor lighting conditions, leading to accidents, errors, and a decline in overall work quality. Adequate illumination is essential amidst the machinery and activity, serving as a beacon of safety and precision. Implementing tailored lighting solutions is imperative to ensure tasks are executed with care, accuracy, and efficiency.

SOLUTION:

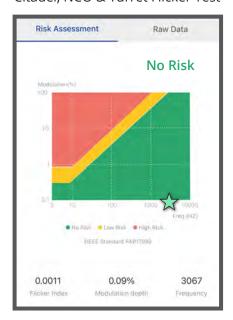
The Citadel lighting system delivers unparalleled brightness without harsh glare, and coverage, ensuring that every corner of the paper mill is well-lit. This is because we use **medium** power LEDs vs. high power LEDs, with a maximum installation of 147 feet. With its industry-leading horsepower, the Citadel guarantees that light levels meet and exceed safety standards, providing a safer workplace and enhancing the quality of operations. This superior illumination also helps to improve workers' morale and productivity, fostering a better working environment.







NO FLICKERCitadel, NCO & Turret Flicker Test



DIY FLICKER TEST:

To test your own fixtures for flicker, record a 10 second video of a light fixture using the **SLO-MO** setting, then re-watch your video. If you see lights flickering in the video, this means the driver is of low quality.



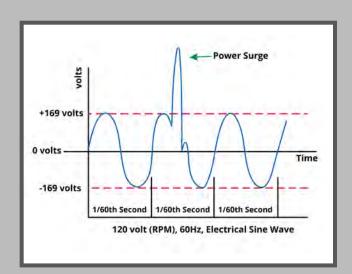
4 BAD POWER QUALITY

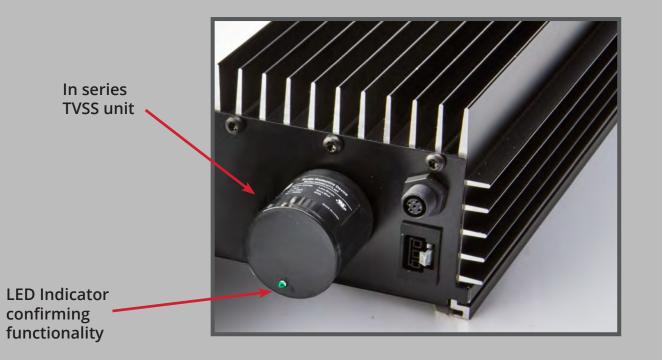
PROBLEM:

The extensive use of large motors and machinery in paper mills often results in poor power quality, characterized by voltage fluctuations and harmonic distortion. These electrical issues can significantly affect the performance and lifespan of lighting systems, leading to inefficiencies and increased maintenance costs. operational costs and minimizes the need for frequent maintenance or replacements.

SOLUTION:

To combat these challenges, the Citadel utilizes in series TVSS. This technology is specifically designed to filter poor power quality conditions, ensuring stable and efficient operation even in the most demanding environments.





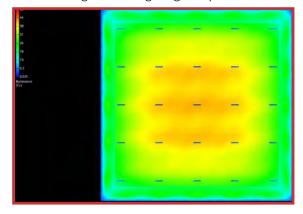
Foot Candle & Optics Representation

Foot candle Averages 20'x20' grid 120 degree

Lumens									
50000	124	113	107	101	96	91	86	82	77
45000	112	102	96	91	86	82	78	74	70
40000	99	91	84	81	77	73	69	65	62
35000	87	79	75	71	67	64	60	57	54
30000	75	68	64	61	57	55	52	49	46
25000	62	57	53	50	48	46	43	41	39
20000	50	45	43	40	38	36	34	33	31
15000	37	34	32	30	29	27	26	25	23
10000	25	23	21	20	19	18	17	16	15
5000	13	11	11	10	10	9	9	8	8
Height	10'	15'	20'	25'	30'	35'	40'	45'	50'

NO OPTICS

> Ideal for general illumination, maximizing horizontal light, and achieving uniform lighting for spaces 30 feet and below.

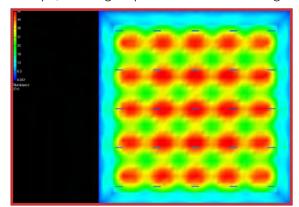


Foot candle Averages 25'x25' grid 120 degree

Lumens									
50000	124	75	70	65	62	58	55	53	50
45000	76	67	63	59	55	52	50	47	45
40000	68	60	56	52	49	47	44	42	40
35000	59	53	49	46	43	41	39	37	35
30000	51	45	42	39	37	35	33	32	30
25000	42	38	35	33	31	29	28	26	25
20000	34	30	28	26	25	23	22	21	20
15000	25	23	21	20	18	18	17	16	15
10000	17	15	14	13	12	12	11	11	10
5000	8	8	7	7	6	6	6	5	5
Height	10'	15'	20'	25'	30'	35'	40'	45'	50'

60 DEGREE OPTICS

> Great for higher ceilings. Best used for fixtures mounted 30+ feet up. (This image captures a 25 foot mounting height).

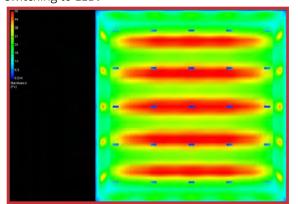


Foot candle Averages 25'x25' grid 60 degree

Lumens									
50000	89	84	77	72	69	67	65	62	60
45000	81	76	69			60	59	56	54
40000	72	67	61	58	56	54	52	50	48
35000	63	59	54	51	49	47	45	44	42
30000	54	50	46	43	42	40	39	37	36
25000	45	42	38	36	35	33	32	31	30
20000	36	34	31	29	28	27	26	25	24
15000	27	25	23	22	21	20	19	19	18
10000	18	17	15	14	14	13	13	12	12
5000	9	8	8	7	7	7	6	6	6
Height	10'	15'	20'	25'	30'	35'	40'	45'	50'

AISLE OPTICS

Perfect for racking, Aisle Optics direct light precisely, reducing the number of fixtures or wattage needed when switching to LED.



Motion Sensor Ordering Information

Wattstopper Low Voltage High/Low/Off PIR Fixture Integrated Outdoor Photo/Motion Sensor (Standard Ordering Selection)

WattStopper La legrand





fig 1.1 *

fig 1.2 *

DESCRIPTION

> The standard Wattstopper Motion Sensor mounts in an outdoor lighting fixture and provides multi-level control based on motion and/or daylight contribution. It controls 0-10 VDC dim-to-off LED drivers or ballasts, or works with a power pack to control other loads. When used with an FSP-Lx Lens, the sensor is rated for wet and cold locations. All control parameters are adjustable via a wireless configuration tool capable of storing and transmitting sensor profiles.

FEATURES

- > Controls 0-10V dim-to-off LED drivers or ballasts, or works with a power pack to control other loads
- > IP66 rated with choice of lenses for wet and outdoor locations, and mounting heights from 8' to 40'
- > Configuration tool stores six sensor profiles for quick setup and adjustment of multiple sensors
- > Polycarbonate construction; flame retardant, UV resistant, impact resistant, recyclable

Citadel, NCO & Turret - Power Cords

FEATURES

- > Choose a whip, straight blade or twist lock cord
- > Hardwire or Plug and Play connection to the fixture
- > Lengths- 6ft or 12 ft; contact us for a custom length

STANDARD POWER CORD OPTIONS (RATED UP TO 158°F)

SERIES	FIXTURE DISCONNECT	VOLTAGE	PLUG AMP RATING	PLUG ATTACHMENT TYPE	LENGTH
PC - Power Cord	HW - Factory Installed Hardwire Cord	125 - 120V	15 - 15 Amps	SB - Straight Blade	6 - 6 Feet
	PP - Plug N Play Connector	250 - 250V	20 - 20 Amps	TL - Twist Lock	12 - 12 Feet
		277 - 277V			
		480 - 480V			
		600 - 600V			
PC					

POWER CORD WHIP OPTIONS

SERIES	FIXTURE DISCONNECT	VOLTAGE	WHIP	LENGTH
PC - Power Cord	HW - Factory Installed Hardwire Cord PP - Plug N Play Connector	300 - 300V 600 - 600V	W - Whip	6 - 6 Feet 12 - 12 Feet
PC			w	

EXTREME TEMP POWER CORD OPTIONS (RATED UP TO 392°F)

SERIES	LENGTH	TEMPERATURE
RC	25 - feet in length 50 - feet in length 100 - feet in length 150 - feet in length 200 - feet in length 250 - feet in length 500 - feet in length 1,000 - feet in length	ET
RC		ET



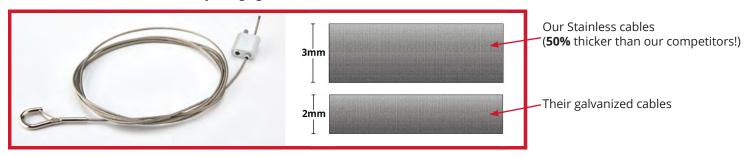


> twist lock, straight blade, and whip cords, a driver, and a remote cable

Citadel, NCO & Turret - Accessories

OUR CABLES VS. OUR COMPETITORS

> Our Stainless Steel Fixture Safety/Hanging Cables



DRIVERS

DRIVER WEIGHT & DIMENSIONS



FIXTURE WATTAGE	WEIGHT	DIMENSIONS
100 Watts	8.090 lbs	
150 Watts	8.222 lbs	
200 & 250 Watts	8.720 lbs	 Single Driver Box- 19.50" x 4.942" x 3.51"
300 Watts	9.140 lbs	3ingle briver box 13.30 x 4.342 x 3.31
400 & 500 Watts	13.675 lbs	Double Driver Box- 33.50" x 4.942" x 3.51"
600 Watts	14.515 lbs	
700 Watts	18.630 lbs	
800 & 900 Watts	19.890 lbs	

FIXTURE BRACKETS & MOUNTING OPTIONS



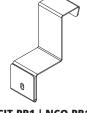
DB-Strut Strut Mount Driver Box



CIT-WM | NCO-WM Universal Swivel Mount



CIT-WM2 | NCO-WM2 Wall Mount



CIT-PR1 | NCO-PR1 Pallet Racking Uplight



CIT-HU | NCO-HU Hanging Uplight

ACCESSORIES & MOTION SENSORS



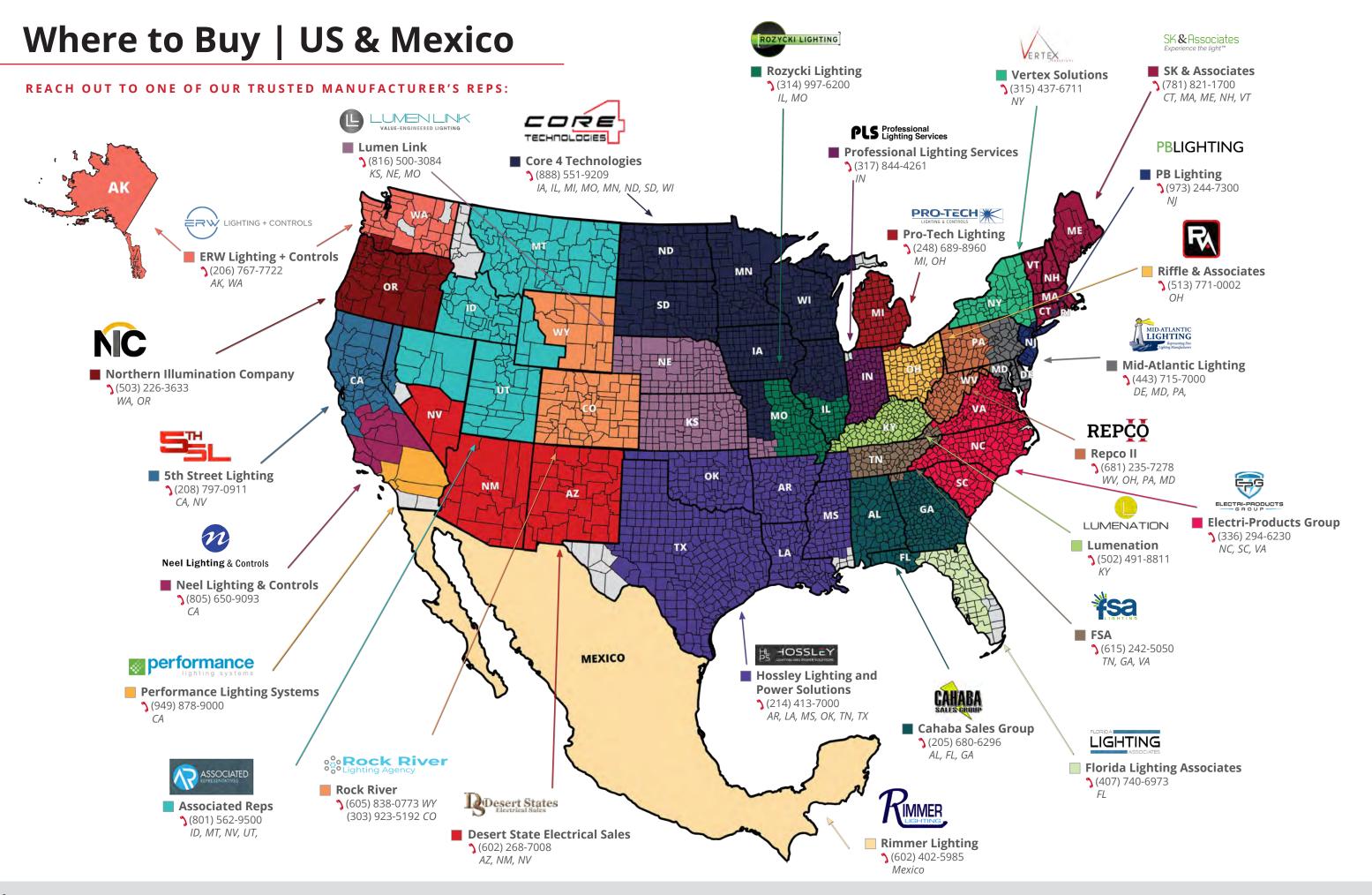
Prismatic Shroud

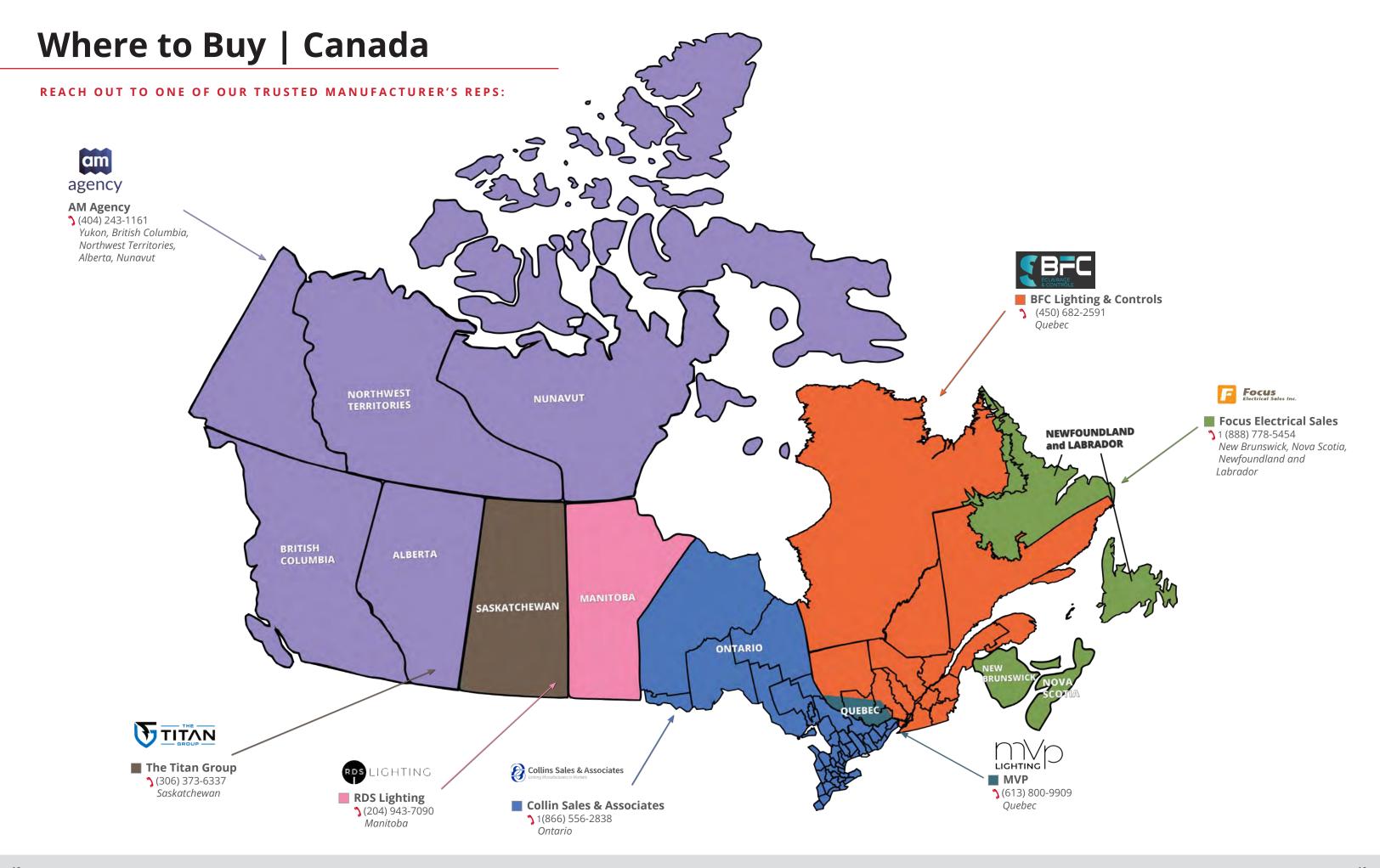


FSP-201Wattstopper with L7 lens



FSP-L7Wattstopper
with L7 lens





Distributors

NAMES:

TACTIK SUPPLIER NUMBER:

All-Phase Electric Supply Co	
Appalachian Electric	TTL100
Border States	56876
City Electric Supply	
Consolidated Electrical Distributors, Inc	
Cooper Electric	499-648
Crescent Electric Supply Company	373437
Elliott Electric Supply	•••
Gexpro	1052098
Graybar	100077509
Green Mountain Electric Supply	108726
Kendall Electric	
Kirby Risk Electrical Supply	
Kovalsky-Carr	188794
Lowe Electric Supply Company	
McNaughton-McKay Electric Company	100017327
Motion Industries	•••
Rexel	1052098
Sonepar	35069
Viking Electric	21953
Werner Electric Supply	9687
Wesco	75873
Wholesale Electric Supply	•••
Womack Electric Supply	

FOR MORE INFORMATION:

Visit our website tactiklighting.com/wheretobuy

Questions & Contact Information

FOR QUESTIONS OR FOR MORE INFORMATION:

By phone: **920-287-3840**By e-mail: **sales@tactik.com**

OPERATING HOURS:

8am-4pm central time, Monday through Friday.

SHIPPING:

Product is shipped from our facilities in Wisconsin. Purchases of \$4,000 or more are shipped free of charge. All other orders are subject to standard shipping fees.

PAYMENT TERMS:

Net 15 days.

RETURNS:

Standard products purchased from Tactik Lighting can be returned in the original packaging, unused and in salable condition for a 20% restocking fee. Returns need to be initiated with Tactik Lighting customer service within 45 days of product delivery. Customer is responsible for return shipping costs. Credit will be issued after product has been received and inspected by Tactik Lighting. Custom solutions are not eligible for return.

Installation Offerings

YOUR SOLUTION MIGHT REQUIRE MORE THAN LIGHTS ALONE

If you've got the skilled resources to take on an install, complete instructions are just a download away. Of course, we understand that skilled resources can be hard to come by internally. Should you need help with installation, we're ready and more than willing to help. We can line up trusted installers who are every bit as responsive, thorough, quality-minded and committed to your success as we are.

Our partners also believe in our philosophy that consistency is the key to continuous improvement.

- Labor pricing labor matrix determines labor price.
- **Procedures** no matter how big or small the project, all are treated the same.
- **Post project documentation** we will verify that we met or exceeded your goals.



Citadel Series LED

Technical Specifications







LUMINOUS OUTPUT, DIMENSIONS & WEIGHT

		STANDA	ARD TEMP	HIGH	1 TEMP	EXTRE	ME TEMP
WATTAGE	OUTPUT	LENGTH	WEIGHT	LENGTH	WEIGHT	LENGTH	WEIGHT
100 Watts	13,220 lumens	18 in	18.039 lbs	18 in	18.039 lbs	26 in	20.941 lbs
150 Watts	21,600 lumens	18 in	18.171 lbs	26 in	20.941 lbs	34 in	24.209 lbs
200 Watts	28,800 lumens	26 in	21.439 lbs	34 in	24.209 lbs	42 in	26.979 lbs
250 Watts	36,000 lumens	34 in	24.209 lbs	42 in	26.979 lbs	60 in	35.676 lbs
300 Watts	43,200 lumens	34 in	24.629 lbs	50 in	30.169 lbs	68 in	41.844 lbs
400 Watts	57,600 lumens	50 in	34.704 lbs	68 in	41.844 lbs	84 in	42.584 lbs
500 Watts	72,000 lumens	50 in	34.704 lbs	84 in	42.584 lbs	110 in	62.189 lbs
600 Watts	86,400 lumens	68 in	42.684 lbs	102 in	48.964 lbs	126 in	63.135 lbs
700 Watts	100,800 lumens	84 in	47.539 lbs	118 in	58.619 lbs	146 in	70.959 lbs
800 Watts	115,200 lumens	92 in	51.569 lbs	136 in	65.419 lbs	146 in	70.959 lbs
900 Watts	129,600 lumens	102 in	54.339 lbs	146 in	70.959 lbs	146 in	70.959 lbs

OPERATIONAL TEMPERATURE

STANDARD TEMP	HIGH TEMP	EXTREME TEMP
-40°F to 130°F (or -40°C to 55°C)	-40°F to 195°F (or -40°C to 90°C)	-40°F to 245°F (or -40°C to 118°C)

FEATURES

- > Driver temperature up to 167°F (75°C)
- > UL Listed Drivers with less than 1% failure rate
- > Patent-pending remote driver minimizes fixture operating temperature without re-gridding required
- Patent-pending design extends fixture life by helping prevent build-up of insulating dust and debris and eliminating illumination dead spots
- Includes 10 Year Module Warranty Full light engine or plug & play driver module replacement, rather than parts
- > Fail off 15KA transient voltage surge suppressor (TVSS) protects fixture against failure due to power supply surges
- Optional motion sensor. Standard sensor by Wattstopper with L7 lens (fig 1.1 & fig 1.2* on pages 13 & 15)
- > Dimmable 0-10V
- > UL 1598 listed
- > IP65 rated
- > BAA & BABA compliant

SPECIFICATIONS

Power Factor	>0.9
Available Wattages	100, 150, 200, 250, 300,
	400, 500, 600, 700, 800, 900
Kelvin Temperatures	4000K, 5000K
Input Voltage	120/277V & 347/480V
Performance	Up to 160 lm/W
Distribution	120°, 60° & Aisle
Mount Type	Suspension
Color Rendering Index (400)	OK)>70
Color Rendering Index (500)	OK)>90

CITADEL ORDERING INFORMATION

ORDER NUMBER: CIT-1-100-40-1-2-1-1-1-X-X-X-1-1

SERIES	WATTAGE	KELVIN	OPTICS	LENS	FINISH	DRIVER VOLTAGE	REMOTE CABLE	MOTION SENSOR	BATTERY BACKUP	DLC	POWER CORD TYPE	CORD LENGTH
CIT-1 Std Temp	100	40- (4000K)	1- None	2- Flat Poly Clear	1- Black	1- 120/277V	X- Integrated Top Mount Driver	X- No	X- No	X- N/A	1- whip 120-277V	1- 6'
CIT-2 High Temp	150 1	50- (5000K)	2- 60°	6- Tempered glass		2- 24V DC	1- 6'	1- Std2	1- Yes	1- Std	2- whip 347-480V	2-12'
CIT-3 Extreme	200		4- Aisle			4- 347/480V	2-10'			2- Prm	3- 125V 15amp Straight	
	250 1						3- 25'				4- 125V 20amp Twistlock	
	300						4- 50'				5- 250V 20amp Twistlock	
	4001						5- 100'				6- 277V 15amp Twistlock	
	5001						6- 200'				7- 277V 20amp Twistlock	
	600 1						7- 500'				8- 480V 20amp Twistlock	
	7001						8- 1,000'				9- 600V 20amp Twistlock	
	8001						9- Custom				M- M12 3 ft	
	9001											

¹ Under review - DLC approval pending

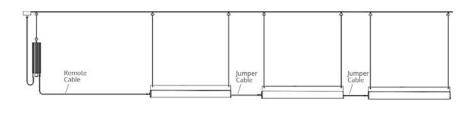
PREVENT PREMATURE FIXTURE FAILURE

As dust & debris accumulate, they act as insulators. This causes internal temperatures to soar and frequently leads to premature fixture failure. The Citadel Series' innovative design addresses this issue three different ways.

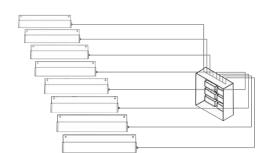


DAISY CHAIN & CONTROL PANEL OPTIONS

Daisy Chain



Control Panel for Multiple Lights



CITADEL DAISY CHAIN ORDERING INFORMATION

ORDER NUMBER: CIT-1-100-40-1-2-1-1-1-X-X-X-1-1-2-1

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SERIES	WATTAGE	KELVIN	OPTICS	LENS	FINISH	DRIVER VOLTAGE	REMOTE CABLE	MOTION SENSOR	BATTERY BACKUP	DLC	POWER CORD TYPE	CORD LENGTH	DAISY CHAIN	FIXTURE CABLE
CIT-1 Std	50	40- (4000K)	1- No Optics	2- Flat Poly Clear	1- Black	1- 120/277V	1- 6'	X- No	X- No	X- N/A	1- whip 120-277V	1- 6'	2	1- 6'
CIT-2 High	100	50- (5000K)	2- 60°	6- Tempered glass		2- 24V DC	2-10'	1- Standard ²	1- Yes	1- Standard	2- whip 347-480V	2-12'	3	2- 10'
CIT-3 Extreme	150		4- Aisle			4- 347/480V	3- 25'			2- Premium	3- 125V 15amp Straight		4	3- 25'
							4- 50'				4- 125V 20amp Twistlock		5	4- 50'
							5- 100'				5- 250V 20amp Twistlock			5- 100'
							6- 200'				6- 277V 15amp Twistlock			6- 200'
							7- 500'				7- 277V 20amp Twistlock			7- 500'
							8- 1,000'				8- 480V 20amp Twistlock			8- 1,000'
							9- Custom				9- 600V 20amp Twistlock			9- Custom
											M- M12 3ft			

Note:

100 Watt Max Daisy Chain = 3.

150 Watt Max Daisy Chain = 2.

² Motion Sensor information: Standard (1) features sensors by Wattstopper with L7 lens.

NCO Series LED

Technical Specifications





LUMINOUS OUTPUT, DIMENSIONS & WEIGHT

		STANDA	ARD TEMP	HIGH	I TEMP	EXTREI	ME TEMP
WATTAGE	OUTPUT	LENGTH	WEIGHT	LENGTH	WEIGHT	LENGTH	WEIGHT
100 Watts	13,220 lumens	18 in	15.087 lbs	18 in	15.087 lbs	26 in	17.061 lbs
150 Watts	21,600 lumens	18 in	15.219 lbs	26 in	17.061 lbs	34 in	19.401 lbs
200 Watts	28,800 lumens	26 in	17.559 lbs	34 in	19.401 lbs	42 in	21.243 lbs
250 Watts	36,000 lumens	34 in	19.401 lbs	42 in	21.243 lbs	60 in	28.213 lbs
300 Watts	43,200 lumens	34 in	19.821 lbs	50 in	23.505 lbs	68 in	32.994 lbs
400 Watts	57,600 lumens	50 in	28.040 lbs	68 in	32.994 lbs	84 in	32.868 lbs
500 Watts	72,000 lumens	50 in	28.040 lbs	84 in	32.868 lbs	110 in	41.759 lbs
600 Watts	86,400 lumens	68 in	33.834 lbs	102 in	37.392 lbs	126 in	51.989 lbs
700 Watts	100,800 lumens	84 in	37.823 lbs	118 in	45.191 lbs	146 in	53.819 lbs
800 Watts	115,200 lumens	92 in	40.925 lbs	136 in	50.135 lbs	146 in	53.819 lbs
900 Watts	129,600 lumens	102 in	42.767 lbs	146 in	53.819 lbs	146 in	53.819 lbs

OPERATIONAL TEMPERATURE

STANDARD TEMP	HIGH TEMP	EXTREME TEMP
-40°F to 130°F (or -40°C to 55°C)	-40°F to 195°F (-40°C to 90°C)	-40°F to 245°F (-40°C to 118°C)



FEATURES

- > Driver temperature up to 167°F (75°C)
- > UL Listed Drivers with less than 1% failure rate
- > Patent-pending remote driver minimizes fixture operating temperature without re-gridding required
- Patent-pending design extends fixture life by helping prevent build-up of insulating dust and debris and eliminating illumination dead spots
- > Includes 10 Year Module Warranty Full light engine or plug & play driver module replacement, rather than parts
- Fail off 15KA transient voltage surge suppressor (TVSS) protects fixture against failure due to power supply surges
- Optional motion sensor. Standard sensor by Wattstopper with L7 lens (fig 1.1 & fig 1.2* on pages 13 & 15)
- > Dimmable 0-10V
- > UL 1598 listed
- > IP65 rated
- > BAA & BABA compliant

SPECIFICATIONS

Power Factor	>0.9
Available Wattages	100, 150, 200, 250, 300,
400	0, 500, 600, 700, 800, 900
Kelvin Temperatures	4000K, 5000K
Input Voltage	120/277V & 347/480V
Performance	Up to 151 lm/W
Distribution	120°, 60° & Aisle
Mount Type	Suspension
Color Rendering Index (4000K)	>70
Color Rendering Index (5000K)	>90

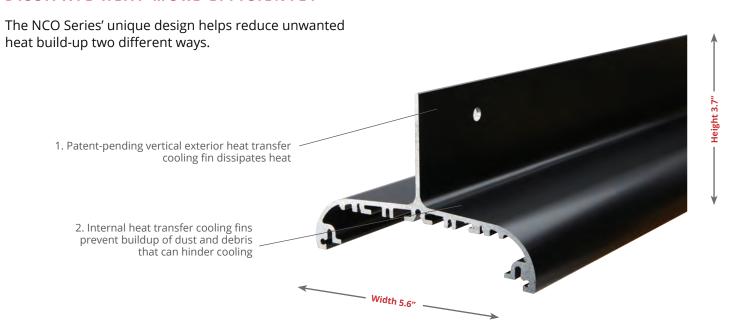
NCO ORDERING INFORMATION

ORDER NUMBER: NCO-1-100-40-1-2-1-1-1-X-X-X-1-1

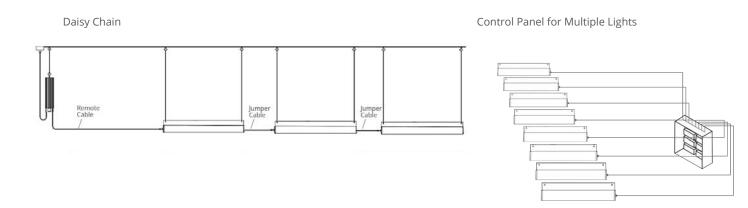
SERIES	WATTAGE	KELVIN	OPTICS	LENS	FINISH	DRIVER VOLTAGE	REMOTE CABLE	MOTION SENSOR	BATTERY BACKUP	DLC	POWER CORD TYPE	CORD LENGTH
NCO-1 Std Temp	100	40- (4000K)	1- None	2- Flat Poly Clear	1- Black	1- 120/277V	X- Integrated Top Mount Driver	X- No	X- No	X- N/A	1- whip 120-277V	1- 6'
NCO-2 High Temp	₁₅₀ 1	50- (5000K)	2- 60°	6- Tempered glass		2- 24V DC	1- 6'	1- Std2	1- Yes	1- Std	2- whip 347-480V	2-12'
NCO-3 Extreme	200		4- Aisle			4- 347/480V	2-10'			2- Prm	3- 125V 15amp Straight	
	2501						3- 25'				4- 125V 20amp Twistlock	
	300						4- 50'				5- 250V 20amp Twistlock	
	4001						5- 100'				6- 277V 15amp Twistlock	
	500 1						6- 200'				7- 277V 20amp Twistlock	
	600 ¹						7- 500'				8- 480V 20amp Twistlock	
	7001						8- 1,000'				9- 600V 20amp Twistlock	
	8001						9- Custom				M- M12 3 ft	
	9001											

¹ Under review - DLC approval pending

DISSIPATE HEAT MORE EFFICIENTLY



DAISY CHAIN & CONTROL PANEL OPTIONS



NCO DAISY CHAIN ORDERING INFORMATION

ORDER NUMBER: NCO-1-100-40-1-2-1-1-1-X-X-X-1-1-2-1

SERIES	WATTAGE	KELVIN	OPTICS	LENS	FINISH	DRIVER VOLTAGE	REMOTE CABLE	MOTION SENSOR	BATTERY BACKUP	DLC	POWER CORD TYPE	CORD LENGTH	DAISY CHAIN	FIXTURE CABLE
NCO-1 Std	50	40- (4000K)	1- No Optics	2- Flat Poly Clear	1- Black	1- 120/277V	1- 6'	X- No	X- No	X- N/A	1- whip 120-277V	1- 6'	2	1- 6'
NCO-2 High	100	50- (5000K)	2- 60°	6- Tempered glass		2- 24V DC	2- 10'	1- Standard ²	1- Yes	1- Standard	2- whip 347-480V	2- 12'	3	2- 10'
NCO-3 Extreme	150		4- Aisle			4- 347/480V	3- 25'			2- Premium	3- 125V 15amp Straight		4	3- 25'
							4- 50'				4- 125V 20amp Twistlock		5	4- 50'
							5- 100'				5- 250V 20amp Twistlock			5- 100'
							6- 200'				6- 277V 15amp Twistlock			6- 200'
							7- 500'				7- 277V 20amp Twistlock			7- 500'
							8- 1,000'				8- 480V 20amp Twistlock			8- 1,000'
							9- Custom				9- 600V 20amp Twistlock			9- Custom
											M- M12 3ft			

Note:

100 Watt Max Daisy Chain = 3.

² Motion Sensor information: Standard (1) features sensors by Wattstopper with L7 lens.

¹⁵⁰ Watt Max Daisy Chain = 2.

Turret Series LED

Technical Specifications







- > Driver temperature up to 167°F (75°C)
- > UL Listed Drivers with less than 1% failure rate
- > Patent-pending remote driver minimizes fixture operating temperature and allows fixture to evolve with changing plant floor demands with no re-gridding required
- > Includes 10 Year Module Warranty Full light engine or plug & play driver module replacement, rather than parts
- Fail off 15KA transient voltage surge suppressor (TVSS) protects fixture against failure due to power supply surges
- Optional motion sensor. Standard sensor by Wattstopper with L7 lens (fig 1.1 & fig 1.2* on pages 13 & 15)
- > Dimmable 0-10V
- > UL 1598 listed
- > IP65 rated
- > BAA & BABA compliant

SPECIFICATIONS

Power Factor	>0.9
Available Wattages	100, 150, 200, 250,
	300, 350, 400
Kelvin Temperatures	4000K, 5000K
Input Voltage	120/277V & 347/480V
Performance	Up to 163 lm/W
Distribution	120°
Mount Type	Suspension
Color Rendering Index (4000K)	>70
Color Rendering Index (5000K)	>90

LUMINOUS OUTPUT & DIMENSIONS

	STANI	DARD TEMP	HIGH TEMP					
WATTAGE	OUTPUT	DIMENSIONS	OUTPUT	DIMENSIONS				
100 Watts	14,400 lm	11" D x 1.9" H	13,940 lm	11" D x 1.9" H				
150 Watts	22,180 lm	11" D x 1.9" H	22,180 lm	16" D x 2.2" H				
200 Watts	32,730 lm	16" D x 2.2" H	32,730 lm	16" D x 2.2" H				
250 Watts	39,910 lm	16" D x 2.2" H	39,910 lm	18" D x 3.5" H				
300 Watts	49,550 lm	18" D x 3.5" H	49,550 lm	18" D x 3.5" H				
350 Watts	57,973 lm	18" D x 3.5" H	N/A	N/A				
400 Watts	66,050 lm	18" D x 3.5" H	N/A	N/A				

OPERATIONAL TEMPERATURE

STANDARD TEMP	HIGH TEMP
-40°F to 125°F (-40°C to 52°C)	-40°F to 185°F (-40°C to 80°C)

TURRET ORDERING INFORMATION

SAMPLE ORDER NUMBER: TUR-1-100-40-1-2-1-1-X-X-X-X-1-1

3115 N 21st Street, Suite 2, Sheboygan, WI 53083

SERIES	WATTAGE	KELVIN	OPTICS	LENS	FINISH	DRIVER VOLTAGE	REMOTE CABLE	MOTION SENSOR	BATTERY BACKUP	DLC	POWER CORD TYPE	CORD LENGTH
TUR-1 Std Temp	100	40- (4000K)	1- None	2- Flat Poly Clear	1- Black	1- 120/277V	X- Integrated Driver	X- No	X- No	X- N/A	1- whip 120-277V	1- 6'
TUR-2 High Temp	150	50- (5000K)		6- Tempered glass clear		2- 24V DC	0- Top Mount	1- Standard ²	1- Yes	1- Standard	2- whip 347-480V	2-12'
	200					4- 347/480V	C- Crane Bay			2- Premium	3- 125V 15amp Straight	
	250						1- 6'				4- 125V 20amp Twistlock	
	300						2- 10'				5- 250V 20amp Twistlock	
	350 ¹						3- 25'				6- 277V 15amp Twistlock	
	400 ¹						4- 50'				7- 277V 20amp Twistlock	
							5- 100'				8- 480V 20amp Twistlock	
							6- 200'				9- 600V 20amp Twistlock	
							7- 500'				M- M12, 3ft	
							8- 1,000'					
							9- Custom					

^{1 350} Watt & 400 Watt fixtures are only available with TUR-1 Standard Temperature

PRODUCT EXAMPLES

Top-Mount Driver

Integrated Driver

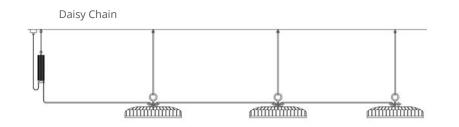
Crane Bay

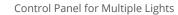


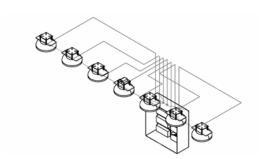




DAISY CHAIN & CONTROL PANEL OPTIONS







TURRET DAISY CHAIN ORDERING INFORMATION

ORDER NUMBER: TUR-1-100-40-1-2-1-1-X-X-X-X-1-1-2-1

SERIES	WATTAGE	KELVIN	OPTICS	LENS	FINISH	DRIVER VOLTAGE	REMOTE CABLE	MOTION SENSOR	BATTERY BACKUP	DLC	POWER CORD TYPE	CORD LENGTH	DAISY CHAIN	FIXTURE CABLE
TUR-1 Std	100	40- (4000K)	1- None	2- Flat Poly Clear	1- Black	1- 120/277V	X- Int. Driver	X- No	X- No	X- N/A	1- whip 120-277V	1- 6'	2	1- 6'
TUR-2 High	150	50- (5000K)		6- Tempered glass clear		2- 24V DC	0- Top Mount	1- Standard	1- Yes	1- Standard	2- whip 347-480V	2-12'	3	2- 10'
						4- 347/480V	C- Crane Bay			2- Premium	3- 125V 15amp Straight			3- 25'
							1- 6'				4- 125V 20amp Twistlock			4- 50'
							2- 10'				5- 250V 20amp Twistlock			5- 100'
							3- 25'				6- 277V 15amp Twistlock			6- 200'
							4- 50'				7- 277V 20amp Twistlock			7- 500'
							5- 100'				8- 480V 20amp Twistlock			8- 1,000'
							6- 200'				9- 600V 20amp Twistlock			9- Custom
							7- 500'				M- M12, 3ft			
							8- 1,000'							
							9- Custom							

TACTIK LIGHTING

Note:

² Motion Sensor information: Standard (1) features sensors by Wattstopper with L7 lens.

¹⁰⁰ Watt Max Daisy Chain = 3.

¹⁵⁰ Watt Max Daisy Chain = 2.

Garrison Series LED

Technical Specifications















SPECIFICATIONS

Input Voltage	120/277\
Performance	Up to 144 lm/W
Distribution	120
Mount Type	Suspended or Surface Mounted
Available Wattages	50W, 75W, 100W, 125W
Kelvin Temperature	4000K, 5000k
Dimensions	L51.8" x W7.5" x H4.4
Color Rendering Index	>70

OPERATIONAL TEMPERATURE

STANDARD TEMP	EXTREME TEMP
-40°F to 149°F (-40°C to 65°C)	-40°F to 200°F (-40°C to 93°C)

LUMINOUS OUTPUT & DIMENSIONS

WATTAGE	OUTPUT	DIMENSIONS
50 Watts	7,200 lumens	
75 Watts	10,500 lumens	51 8" x 7 5" x 4 4"
100 Watts	14,400 lumens	31.0 77.3 74.4
125 Watts	16,000 lumens	

FEATURES

- > Stainless housing for optimal heat dissipation
- > Suspend or surface mount the fixture
- > In-series transient voltage surge suppressor (TVSS) protects fixture against failure due to dirty power and power supply surges
- > Dimmable 0-10V
- > Optional motion sensor. Standard sensor by Wattstopper with L7 lens (fig 1.1 & fig 1.2* on pages 13 & 15)
- > Includes 5 Year Parts Warranty
- > UL 1598 listed
- > Rated IP65
- > BAA & BABA compliant

OPTIONAL ACCESSORIES

- > Motion Sensor
- > 10' Aircraft Cable Kit
- > Emergency Battery Backup (see page 2 for more information)

ADDITIONAL DATA

- > Stainless Steel Type: SS-304
- > Remote Cable(s): Up to 90°C (194°F)
- > Polycarbonate Lens: Up to 138°C (280°F)
- > Motion Sensor: Up to 77°C (167°F)
- > UL 1598 listed
- > Rated IP65

GARRISON ORDERING INFORMATION

SAMPLE ORDER NUMBER: GAR-7-X50-40-1-3-2-1-1-X-X-1

SERIES	WATTAGE	KELVIN	OPTICS	LENS	FINISH	DRIVER VOLTAGE	REMOTE CABLE	MOTION SENSOR	BATTERY BACKUP	CORD
GAR-7 Std	X50- (50W)	40- (4000K)	1- No Optics	3- Drop Poly Frosted	2- Stainless	1- 120/277V	1- N/A	X- No	X- No	1- 125V, 15amp, SB, 6ft
GAR-8 Extreme	X75- (75W)	50- (5000K)				2- 24V DC		1- Standard*	1- Yes	3- 125V, 15amp, TL, 6ft
	100- (100W)									4- 125V, 15amp, TL, 12ft
	125- (125W)									9- 277V, 15amp, TL, 6ft
										D- 300V, Whip, 6ft
										M- M12, 3ft

^{*} Motion Sensor part information: Standard (1) features sensors by Wattstopper with L7 Lens.

APACHE Series LED

Technical Specifications















APPLICATIONS

- > Power Plants / Heavy Industrials
- > Distillery, Alcohol
- > Paper Mills / Wastewater Treatment Plants
- > Loading Docks / Platforms / Shipyards
- > Chemical Processing Facility
- > Mining
- > Ocean Marine
- > LNG facilities
- > Metal Industry
- > Meanwell Driver



BAA and TAA available. Contact factory for more information and pricing.

FEATURES

- > 2ft and 4ft lengths available
- > Meanwell Driver
- > High efficacy: up to 140 lm/W
- > Standard 120-277V. Available Options also include • 277-480V
- 12-36VDC
- > Temp Rating for 20-80W Models: -40°C to 60°C (-40°F to 140°F)
- > Temp Rating for 90-120W Models: -40°C to 40°C (-40°F to 104°F)
- > Three connection cable entry
- > Aircraft Aluminum Housing with Marine Die-Cast Powder Finish Coat
- > Standard 10KV surge protection
- > Standard integrated junction box
- > 1.5 3 Hour Emergency Operation (optional)
- > 5 or 10 Year Limited Warranty (specified in part number)

COMPLIANCE

UL 844 Hazardous Locations North America

- > Class I, Division 1, Group C,D
- > Class I, Division 2, Groups A, B, C & D
- > Class II, Division 2, Groups F & G
- > Class III

Other Markings/Standards

- > UL 1598 Wet Locations
- > UL 8750 LED Safety
- > DLC Listed
- > CSA C22.2 No. 250.0-08
- > CSA C22.2 No. 137-M1981

LUMINOUS OUTPUT & DIMENSIONS

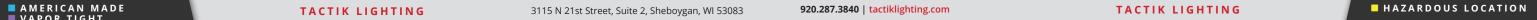
WATTAGE	3000K	4000K	5000K	6000K	DIMENSIONS
40 Watts	4,800 lumens	5,120 lumens	5,400 lumens	5,600 lumens	2 foot -
60 Watts	7,200 lumens	7,680 lumens	8,100 lumens	8,400 lumens	23.3" x 9.1" x 5.5"
80 Watts	9,600 lumens	10,240 lumens	10,800 lumens	11,200 lumens	
100 Watts	12,000 lumens	12,800 lumens	13,500 lumens	14,000 lumens	4 foot - 46.6" x 9.1" x 5.5"
120 Watts	14,400 lumens	15,360 lumens	16,200 lumens	16,800 lumens	10.0 X 5.1 X 5.5

APACHE ORDERING INFORMATION

SAMPLE ORDER NUMBER: APA-4-1-4-1-3-1-1-2-X

SERIES	LENGTH	LENS	WATTAGE	VOLTAGE	сст	OPTIC	DRIVER	WARRANTY	OPTIONS
APA	2- 2 feet	1- Glass	4- 40W	1- AC 120-277V	1- 3000K	1- 120°	1- Dim	5 - 5 Year	X- None
	4- 4 feet		6 - 60W	2- AC 277-480V	2- 4000K		2- Non-Dim	10 - 10 Year	1- EMB
			8-80W	3- DC 12-36V	3- 5000K				2- Custom Cable Length
			10 - 100W		4- 6000K				3- Junction Box
			12 - 120W						4- BAC*
									5- TAC*

^{*} BAC = Buy American Compliant | TAC* = Trade Agreements Act Compliant



BRIGADIER Series LED

Technical Specifications















APPLICATIONS

- > Power Plants
- > Heavy Industrials Storage Facility
- > Paper Mills
- > Wastewater Treatment Plants
- > Loading Docks
- > Platforms
- > Shipyards
- Chemical Processing Facility
- > Petrochemical Processing Facility

FEATURES

- Available in 30W, 50W, 75W, 100W, 120W; 150W, 180W, 200W, 240W
- > Optional stainless steel guard
- > Wildlife Friendly for coastal areas.
- > 1-10V dimmable and DALI control optional.
- > IP66 and IK08 double protection, with super reliability
- > Input Voltage: AC120-277V, AC277-480V (50/60Hz)
- Pendant, Ceiling, Wall, Trunnion, 25° Stanchion and 90° Stanchion mounting options
- > Warm White-Cool White options 2000K 6500K
- > Colored LED available: R/G/B/AMBER options
- > Type I, III and V light distribution options
- > Flip-type structure for easy access to internal components provides up to 1,350lm illumination for 90 minutes of emergency lighting
- > Well-organized terminal block, the ceiling mounting, bracket mounting and wall mounting are equipped with four conduit holes.
- > Easy wiring with self-locking spring terminals.
- > Equipped with low copper aluminum alloy body and special powder coating, as well as stainless steel components with special anti-corrosion treatment make it suitable for marine environments for over 10 years.
- > LED chips are separated from the driver cavity, ensures good heat dissipation and longer service life.

CERTIFICATIONS AND LISTINGS UL:

- > Class I, Division 2, Groups A, B, C, D
- > Class II, Division 1, Groups E, F, G
- > Class II, Division 2, Groups F, G
- > Class III
- > NEMA 4X
- UL 1598 Wet Locations | UL 1598A Marine | UL 8750 LED Safety | UL 844 - Hazardous Locations CSA Standard | UL924 -Emergency Lighting
- > CSA C22.2 No. 137
- > CSA C22.2 No. 250.0
- > CSA C22.2 No. 141

LUMINOUS OUTPUT

WATTAGE (W)	30W	50W	75W	100W	120W	150W	180W	200W	240W
LUMENS (Lm)	4,050 Lm	6,750 Lm	10,125 Lm	13,500 Lm	16,200 Lm	20,250 Lm	24,300 Lm	27,000 Lm	32,400 Lm

BRIGADIER ORDERING INFORMATION

SAMPLE ORDER NUMBER: BRI-20-1-3-T32003-2-X-2-5

SERIES	WATTAGE	VOLTAGE	сст	OPTICAL	CRI	ACCESSORIES	MOUNTING	WARRANTY
BRI	3 - 30W	1- 120-277V	1- 3000K		1- 70	X- None	1- Trunnion Mount	5 - 5 Year
	5 - 50W	2- 277-480V	2- 4000K		2- 80	1- 3/4" NPT	2- Ceiling Mount	10- 10 Year
	7 - 75W		3- 5000K	See	3-90	2S- Wire Guard 30-100W	3- Pendant Mount	
	10 - 100W		R- Red	Photometrics Codes Spec		2L- Wire Guard 120-240W	4- Wall Mount	
	12 - 120W		G- Green	Sheet via			5- 25° Stanchion Mount	
	15 - 150W		B- Blue	QR Code			6- 90° Stanchion Mount	
	18 - 180W		A- Amber					
	20 - 200W							
	24- 240W							

COLONEL Series LED

Technical Specifications





APPLICATIONS

> Pulp and paper

> Manufacturing

> Power generation

> Paint spray booths

LUMINOUS OUTPUT

EFFICACY (Lm/W)

> Oil, gas and petrochemical

> Waste and sewage treatment

LUMINOUS OUTPUT

> Chemical

> Foundries









FEATURES

- > Standard 120° Optic
- > Wildlife Friendly for coastal areas.
- > Available in 30W, 40W, 50W, 60W, 70W;
- > 1-10V dimmable and DALI control optional.
- > IP66 and IK10 double protection, with super reliability
- > Input Voltage: AC120-277V, AC277-480V (50/60Hz)
- > Pendant, Ceiling, Wall, Trunnion, 25° Stanchion
- > Warm White-Cool White options 2000K 6500K
- > Colored LED available: R/G/B/AMBER options
- > The max operating ambient temperature range: -40°C to 65°C (-40°F to +149°F).
- > Quick connection design, the installation wiring module is connected with the fixture thread, more convenient and faster installation and wiring.
- > Equipped with low copper aluminum alloy body and special powder coating, as well as stainless steel components with special anti-corrosion treatment.
- > Well-organized terminal block, the ceiling mounting, bracket mounting and wall mounting are equipped with four conduit holes
- > LED chips are separated from the driver cavity, ensures good heat dissipation and longer service life.
- > Optional stainless-steel guard

CERTIFICATIONS AND LISTINGS UL:

- > Class I, Division 1, Groups B, C, D
- > Class I, Division 2, Groups A, B, C, D
- > Class II, Division 1, Groups E, F, G
- > Class II, Division 2, Groups F, G
- Class III
- > NEMA 4X
- > UL 1598 Wet Locations | UL 1598A Marine | UL 8750 LED Safety | UL 844 - Hazardous Locations

CSA Standard

- > CSA C22.2 No. 137
- > CSA C22.2 No. 250.0

PRODUCT MOUNTING DIMENSIONS

4200-9800 Lumens

Up to 140 Lm/W

	Ceiling Mount 25° Stanchion Mount		ing Mount 25° Stanchion Mount Wall Mount				Pendant Mount			Trunnion Mount									
U	mit	Α	В	С	Α	В	С	D	А	В	С	D	Α	В	С	Α	В	С	D
Ir	nch	10.8"	7.0"	9.8"	10.8	7.0	9.8	12.6	10.7	7.0	9.8	13.2	11.5	7.0	9.8	13.7	11.5	11.2	9.1
n	nm	274	179	248	275	179	248	320	271	179	248	336	292	179	248	348	292	284	230

COLONEL ORDERING INFORMATION

SAMPLE ORDER NUMBER: COL-5-1-2-1-3-X-2-5

SERIES	WATTAGE	VOLTAGE	ССТ	OPTICAL	CRI	ACCESSORIES	MOUNTING	WARRANTY
COL	3- 30W	1- 120-277V	1- 3000K	1- 120°	1- 70	X- None	1- Trunnion Mount	5 - 5 Year
	4- 40W	2- 277-480V	2- 4000K		2-80	1- 3/4" NPT	2- Ceiling Mount	10 - 10 Year
	5- 50W		3- 5000K		3- 90	2- Wire Guard	3- Pendant Mount	
	6 - 60W		R- Red				4- Wall Mount	
	7 - 70W		G- Green				5- 25° Stanchion Mount	
			B- Blue					
			A- Amber					

■ HAZARDOUS LOCATION TACTIK LIGHTING 3115 N 21st Street, Suite 2, Sheboygan, WI 53083 920.287.3840 | tactiklighting.com TACTIK LIGHTING HAZARDOUS LOCATION 3

SHERMAN Series LED

Technical Specifications

















APPLICATIONS

- > Power Plants / Heavy Industrials
- > Distillery, Alcohol
- > Paper Mills / Wastewater Treatment Plants
- Loading Docks / Platforms / Shipyards
- > Chemical Processing Facility
- > Mining
- > Ocean Marine
- > LNG facilities
- > Metal Industry

LUMINOUS OUTPUT & DIMENSIONS

WATTAGE	OUTPUT	DIMENSIONS
20 Watts	2,800 lumens	2 foot -
30 Watts	4,200 lumens	27.48" x 8.66" x 5.45"
40 Watts	5,600 lumens	Africa
50 Watts	7,000 lumens	4 foot - 51.97" x 8.66" x 5.45"
60 Watts	8,400 lumens	

FEATURES

- > Expected Life: 50.000 hours
- > Rating: UL844 Class 1 Division 2
- > Color Rendering Index (CRI): >70 > Operating Temp: -40°C to +45°C
- > Power Factor: >0.9
- > Input Line Voltage:
- 100-277V
- 200-480V
- > Input Line Frequency: 50/60Hz
- > LED Chips: Philips
- > Driver: Meanwell
- > Housing: Standard 304 Stainless Steel
- Optional 316 Stainless Steel
- > Hardware: 304 Stainless Steel
- > Lens: Polycarbonate

COMPLIANCE

UL 844 Hazardous Locations North America

- > Class I, Division 2, Groups A, B, C, D
- > Class II, Division 1, Groups E, F, G
- > Class II, Division 2, Groups F, G
- > Class III

Marking Atex

- > II 2 G Ex db eb mb IIC T5/T6 Gb
- > II 2 D Ex tb IIIC T95°C/T85°C Db IP66

Marking ICEX

- > Ex db eb mb IIC T5/T6 Gb
- > Ex tb IIIC T95°C/T85°C Db

Marking Marine

> UL1598, UL1598A

Other Markings/Standards

> IP66



BAA and TAA available. Contact factory for more information and pricing.

SHERMAN ORDERING INFORMATION

SAMPLE ORDER NUMBER: SHE-2-4-1-2-1-1-2-2-5

SERIES	LENGTH	WATTAGE	VOLTAGE	сст	OPTIC	DRIVER	OPTIONS	MOUNTING/ACCESSORIES	WARRANTY
SHE	2 - 2 feet	2 - 20W	1- 120-277V	1- 4000K	1- 120°	1- 0-10V Dim	1- Sensor	1- Pendant Mount	5 - 5 Year
	4- 4 feet	3- 30W	2- 277-480V	2 - 5000K		2- Non-Dim	2- 316 Stainless Steel Hardware	2- Surface Mount	10 - 10 Year
		4- 40W					3- BAA	3- Wall Mount	
		5 - 50W					4- TAA	4- Pole Mount	
		6 - 60W							

SHIELD Series LED

Technical Specifications













APPLICATIONS

- > Power Plants / Heavy Industrials Storage Facility
- > Paper Mills / Wastewater Treatment Plants
- > Loading Docks / Platforms / Shipyards
- > Chemical Processing Facility
- > Petrochemical Processing Facility
- > Mining
- > Ocean Marine
- > LNG facilities
- > Metal Industry
- > Food and distilling
- > Alcohol Industry
- > Steel and aluminum factories

FEATURES

- > Lens: Tempered Glass
- > LED Chips: Philips
- > Driver: Meanwell
- > Hardware: Stainless Steel 304
- > Finish: Polyester Powder coat
- > Surge Protection: 10KV
- > Expected Life: Over 85,000 hrs.
- > Color Rendering Index (CRI): 70
- > Heavy-duty and high impact resistance
- > Four connection cable entry points
- > Dimmable and non-dimmable options available.
- > Emergency battery backup available with integrated junction box for driver.
- > Tempered glass lens standard with opal globe and guard. Options include:
- Flat Glass Lens Dome Reflector Angle Reflector
- > Standard 120-277V, Available options include:
- > Operating Temperature: -20°C 60°C (-4°F 140°F)
- > Housing: Copper Free A383 Die Cast Aluminum
- > Gasketing: Fluorosilicone Rubber

COMPLIANCE

UL 844 Hazardous Locations North America

- > Class I, Division 2, Groups A, B, C, D
- > Class II, Division 1, Groups E, F, G
- > Class II, Division 2, Groups F, G
- > Class III

Other Ratings

> NEMA 4X, IP66, IK10, UL1598A Marine Vessels, UL924 Emergency



BAA and TAA available. Contact factory for more information and pricing.

TECHNICAL DATA & DIMENSIONS

MODEL	WATTAGE	OPERATING VOLTAGE	TOTAL LUMENS	EFFICACY (Lm/W)	CRI	сст	DIMENSIONS
SHI-1	10W	AC 120-277V	1,400	140	>70	2200K-7000K	
SHI-2	20W	AC 120-277V	2,800	140	>70	2200K-7000K	13.08" x 8.98" x 5.71"
SHI-3	30W	AC 120-277V	4,200	140	>70	2200K-7000K	13.00 x 6.30 x 3.71
SHI-4	40W	AC 120-277V	5,600	140	>70	2200K-7000K	

SHIELD ORDERING INFORMATION

SAMPLE ORDER NUMBER: SHI-2-1-3-1-1-3-OPEB

SERIES	WATTAGE	VOLTAGE	ССТ	OPTIC	DRIVER	WARRANTY	OPTIONS	MOUNTING/ACCESSORIES
SHI	1- 10W	1- AC120-277V	1- 3000K	1- 120°	1- 0-10V Dim	5 - 5 Year	X- None	X- None
	2 - 20W	2- 12-36VDC	2- 4000K	2 - 90°	2- Non-Dim	10 - 10 Year	1- Flat Glass Lens	OPEM- Junction Box
	3 - 30W		3- 5000K	3- 60°			2- Clear Globe	OPCM- Ceiling/Surface Mount Junction Box 3/4" NPT
	4- 40W		4- 6000K	4 - 40°			3- Frosted Globe	OPWA- 90° Wall Mount
							4- Wire Guard	
							5- Clear Globe w/ Wire Guard	
							6- Frosted Globe w/ Wire Guard	
							7- Dome Reflector	
							8- Angle Reflector	
							9- Buy American Act Compliant	
							10- Trade Agreements Act Compliant	

32 HAZARDOUS LOCATION HAZARDOUS LOCATION TACTIK LIGHTING 3115 N 21st Street, Suite 2, Sheboygan, WI 53083 920.287.3840 | tactiklighting.com TACTIK LIGHTING

VANGUARD Series LED

Technical Specifications





















Wire Guard

APPLICATIONS

- > Power Plants
- > Storage Facilities
- > Paper Mills
- > Waste Water Treatment Plants
- > Heavy Industrials
- > Loading Docks
- > Shipyards
- > Chemical Processing Facilities
- > Petrochemical Processing Facilities

LUMINOUS OUTPUT & DIMENSIONS

WATTAGE (W)	LUMENS (Lm)	DIMENSIONS	
150W	22,500 Lm		
200W	30,000 Lm	22.32" x 18.62" x 6.86"	
240W	36,000 Lm		

FEATURES

- > Finish: Powder Coat
- > Lens: Polycarbonate
- > LED Chips: LED 3030
- > Driver: Inventronics / MOSO
- > Expected Life: 244,000 hrs
- > Rating: IP66 & IK08
- > Three wattages available: 150W, 200W, 240W
- > Up to 150lm/W, lumen packages from 22,500lm / 30,000lm /
- > Color temperatures: 2000K 6500K
- > Colored LED available: R/G/B/AMBER options
- > Wildlife Friendly for coastal areas.
- > Diversified light distributions to meet various applications
- > Double cable entry available easy mounting
- > Equipped with low copper aluminum alloy body, special powder coating, stainless steel components, and hot-dip galvanized: all these anti-corrosion characteristics make the VANGUARD Series suitable for marine applications
- > LED chips are separated from the driver cavity ensuring exceptional heat dissipation and longer life span
- > Cover on the driver box is designed for anti-dislodging
- > Easy wiring with self-locking spring terminals
- > Ambient temperature:
 - 150W: -40°C to 65°C (-40°F to 149°F)
 - 200W: -40°C to 60°C (-40°F to 140°F)
 - 240W: -40°C to 50°C (-40°F to 122°F)
- > Housing: Aluminum Alloy (less than 0.4% copper content)
- > Surge Protection: 10kV line-line, 10kV line-earth
- > Color Rendering Index (CRI): 70/80/90

CERTIFICATIONS AND LISTINGS UL:

- > Class I. Division 2. Groups A. B. C. D
- > Class II, Division 1, Groups E, F, G
- > Class II, Division 2, Groups F, G
- > Class III
- > NEMA 4X
- > UL 1598 Wet Locations | UL 1598A Marine | UL 8750 LED Safety | UL 844 - Hazardous Locations

CSA Standard

- > CSA C22.2 No. 137
- > CSA C22.2 No. 250.0

VANGUARD ORDERING INFORMATION

SAMPLE ORDER NUMBER: VAN-15-1-01606-2-X-1-5

SERIES	WATTAGE	VOLTAGE	сст	OPTICAL	CRI	ACCESSORIES	RATING	WARRANTY
VAN	15 - 150W	1- 120-277V	1- 3000K	See Photometrics Codes Spec Sheet via QR Code	1- 70	X- None	1- Hazardous UL844	5 - 5 Year
	20 - 200W	2- 277-480V	2- 4000K		2-80	1- Visor	2- Marine 1598A	10 - 10 Year
	24 - 240W		3- 5000K		3- 90	2- Wire Guard	3- Wet Location 1598	
			R- Red					
			G- Green					
			B- Blue					
			A- Amber					

EVAC Series LED

Technical Specifications





APPLICATIONS

- > Power Plants / Heavy Industrials
- > Distillery, Alcohol
- > Paper Mills / Wastewater Treatment Plants
- > Loading Docks / Platforms / Shipyards
- > Chemical Processing Facility
- > Petrochemical Processing Facility
- > Mining
- > Ocean Marine
- > LNG facilities

FEATURES

- > High durability and reliability
- > Label content customizable
- > Low working wattage for energy saving
- > 3/4" NPT or M25 conduit hubs
- > Pendant, wall and end bracket mounts provide universal installation options. Glass sign panel makes cleaning easy
- > Long lifespan: Up to 50,000 hours
- > Operating Temperature: -40°F to 140°F
- > Emergency Battery included (90 minutes)

MATERIALS

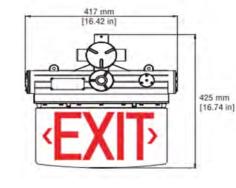
- > Housing: A356T6 Aluminum with baked epoxy finish
- > Sign Panel: Tempered Glass (Transparent)
- > Letters: Red (std) or Green
- > Weight: 13.23LBS.
- > Gasket: One-piece Silicone
- > Hardware: Stainless Steel (including hangers)

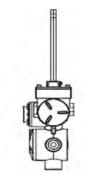
RATINGS/CLASSIFICATIONS

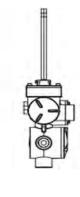
- > Marking UL844
- > Class I, Division 1, Groups B, C, D
- > Class I, Division 2, Groups A, B, C, D
- > Class II, Division 1, Groups E, F, G
- > Class II, Division 2, Groups F, G
- > Class III
- > Marking Marine UL924
- > Other: Wet Location

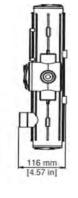
DIMENSIONS

Length	16.42"
Width	4.57"
Height	16.74"









EVAC ORDERING INFORMATION

SAMPLE ORDER NUMBER: EVA-3-1-1-2

SERIES	WATTAGE	LETTERS	VOLTAGE	OPTIONS	
EVA	3- 3W	1- Red	1- 120-277V	1- Wall Mount	
	5- 5W	2- Green		2- Pendant Mount	

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- > Shortens lead times
- > Get American quality not foreign tariffs



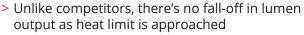
REFURBISHMENT PROGRAM

- > Lowest life cycle cost
- > Low LED & driver running temperatures
- > Rugged military-grade design
- > Quality materials, components and construction



HIGHER HEAT RATINGS

- > Fixtures rated up to 125°F, 195°F, and 245°F
- > Up to a 30% increase compared to leading competitors





PATENT PENDING DESIGNS

- > Sets new standards for cooling efficiency over the life of the fixture
- > Innovative, vertical exterior cooling fin dissipates heat while preventing dust and debris build-up
- > Internal cooling fins provide additional protection against dust and debris







THE TACTIK ADVANTAGE

At Tactik Lighting,
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Our team has decades
of experience helping
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We've seen what doesn't work and we refuse to do it that way.
Our standards are set high only to deliver the very best products to our clients.



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