



Nexus™

High Mast

DESCRIPTION

The Nexus™ High Mast by TGS represents the pinnacle of quality and forward-thinking design in large area lighting. Designed for both retrofit and new construction use, Nexus™ provides the flexibility of multiple lumen packages, field-adjustable illuminance settings, integrated control options, and multiple beam options using proprietary PC or glass lenses. Nexus™ is the ideal option for lighting highways, interchanges, ports, rail yards, container yards, parking lots, correctional facilities, security lighting, treatment plants and other facilities.

APPLICATION

Highways, Interchanges, Ports, Rail Yards, Container Yards, Parking Lots, Correction Facilities, Treatment Plants

FEATURES

Construction

Rugged A383 die cast aluminum alloy housing optimized for thermal management through conductive and convection cooling. The housing is powder coated that achieves a scribe creepage of 8 (per ASTM D1654) after 1,000 hours exposure to salt fog chamber (per ASTM B117). Four bolt horizontal arm mount with +/- 5 degree vertical adjustment. 3G vibration rating per ANSI C136. Mast arm mount is adjustable for arms from 1-5/8" to 2-3/8". Two captive bolts disengage top cover for easy access to drivers, surge protection, and terminal blocks. Finish in gray standard.

Optical System

Glare reducing prismatic PC (standard) or glass optics (optional) ensure longevity and minimize dirt depreciation. Zero uplight optics reduce sky glow and meets Dark Sky requirements. Optics provide overlapping pattern on application space eliminating dark spots. Rotatable optic assembly provides alignment of asymmetric distributions to roadway. Available in distribution of Type II, III, IV, V.

Warranty

5 Year Warranty.  
Optional 10 Year Warranty Available  
See warranty documentation for more information.



Electrical

Input voltage: 100-277VAC/50 & 60Hz  
High voltage: 277-480VAC/60Hz (Option)  
Quick connectors included, a three stage terminal block is standard for ease of installation and maintenance.  
Standard 20kV/10kA surge protection compliant with:  
ANSI C136.2-2015 Extreme  
IEEE C62.41.2 Location Category C High Exposure

Controls

1-10V Dimming comes standard.  
3 pin, 5 pin, or 7 pin twist lock receptacle with On/Off Photocell available.  
Dimulator Dimming Photocontrol available.  
Photocell for solid -state lighting meets ANSI C136.10 criteria.  
7 pin Twist Lock RADIANT™ Wireless Control Photocell with Power Monitoring and External Sensor Input.

EPA Rating/Outdoor Rating/Impact Rating

EPA (ft²): 1.5 (210W-750W)  
Enclosure Rating: IP66 / NEMA 4X  
Impact Rating: IK08

Nexus™

- 210W (30,977 lm)
- 240W (36,978 lm)
- 320W (49,826 lm)
- 475W (68,741 lm)
- 570W (79,800 lm)
- 630W (96,105 lm)
- 750W (110,120 lm)

Projected L90: 66,000+ hours  
Warranty: 5 Years  
System Efficacy: Up To 155 LpW  
1-10V Dimming



1-10V  
Dimming



IP66  
Fixture



20kV Surge  
Protector



5050 LED  
Package



Dark Sky  
Friendly  
(Zero Uplight/  
3000K)



On/Off  
Photocell  
Option

Ordering Information

EXAMPLE: NEX-630-50-U-D-3

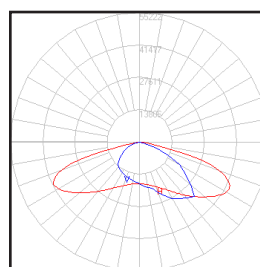
SERIES	Wattage	CCT	Input Voltage	Controls	Distribution	Optic Options
NEX	210 - 210W	50 - 5000K 40 - 4000K 30 - 3000K	U - 100-277VAC H - 277-480VAC	D - 1-10V Dimming (Standard)	2 - Type II 3 - Type III 4 - Type IV 5 - Type V	PC Optic (Standard) G - Glass Optic
	240 - 240W			D1 - Twist-lock Radiant Wireless Control System		
	320 - 320W			P3P - 3 pin Receptacle with On/Off Photocell		
	475 - 475W			P5P - 5 pin Receptacle with On/Off Photocell		
	570 - 570W			P7P - 7 pin Receptacle with On/Off Photocell		
	630 - 630W			P3S - 3 pin Receptacle with Short Cap		
	750 - 750W			P5S - 5 pin Receptacle with Short Cap		
				P7S - 7 pin Receptacle with Short Cap		
				DIM4-U - Dimulator 120-277 VAC with 7 pin		
				DIM4-H - Dimulator 480VAC with 7 pin		
Accessories						
NEX-FS (Field Adjustable Lumen Switch)						
NEX-HS90 (External Field Installed 90° Shield)						
NEX-HS120 (External Field Installed 120° Shield)						
NEX-HS180 (External Field Installed 180° Shield)						
NEX-LF (Littelfuse®- 2 Fuse)						
DSF (Dark Sky Friendly [3000K])						

## Performance Information

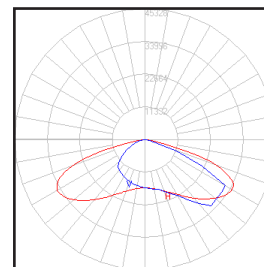
Input Voltage	100-277V, 277-480V (Optional)
Input Frequency	50/60Hz, 60Hz
Wattage	See Performance Table
Delivered Lumens	See Performance Table
Efficacy	See Performance Table
CRI	>70
Available CCT	3000K, 4000K, 5000K
Projected L90	66,000+ hours
Power Factor	>0.95
THD	<20%
Dimming	1-10V Dimming
Operating Temp.	-40°~122°F
IP Rating	IP66

## Available IESNA Distribution Type

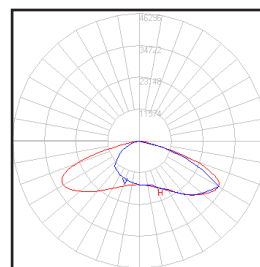
\* IESNA LM-63 IES Available



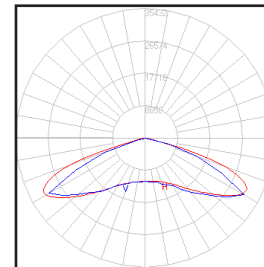
TYPE II



TYPE III



TYPE IV



TYPE V

## Performance Table

\*LM79 & LM80 Available upon request

SKU	Wattage (W)	3000K	
		Delivered Lumens (lm)	Efficacy (lm/W)
NEX-210-30-U-D	210	30977	146
NEX-240-30-U-D	240	36978	152
NEX-320-30-U-D	320	49826	155
NEX-475-30-U-D	475	68741	144
NEX-570-30-U-D	570	79800	140
NEX-630-30-U-D	630	96105	146
NEX-750-30-U-D	750	110120	144

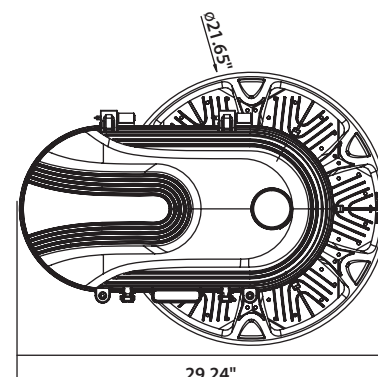
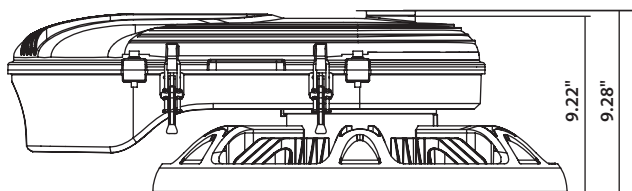
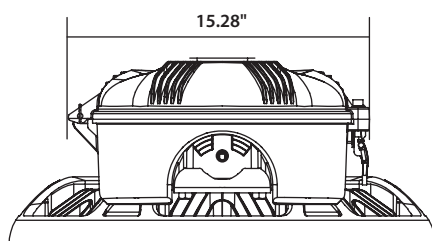
\*Request for IES files for BUG rating

## Electrical Load

System Wattage (W)	Current (A)					
	120V	208V	240V	277V	347V	480V
210	1.84	1.06	0.92	0.80	0.64	0.46
240	2.10	1.21	1.05	0.91	0.73	0.53
320	2.80	1.62	1.40	1.21	0.97	0.70
475	4.16	2.40	2.08	1.08	1.44	1.04
570	4.99	2.88	2.49	2.16	1.72	1.25
630	5.51	3.18	2.76	2.39	1.91	1.38
750	6.56	3.79	3.28	2.84	2.27	2.86

## Product Dimensions

210W/240W/320W/475W/570W/630W/750W



210W~320W Weight: 40 lbs.  
475W~750W Weight: 55 lbs.

Accessories



+

3Pin, 5Pin or 7Pin Receptacle  
& On/Off Photocell  
[P3, P5 or P7]



+

7 Pin Receptacle & Dimulator  
[DIM4-U or DIM4-H]



Twist-lock Radiant  
Wireless Control System  
[TL7-B2 (110-277VAC)]  
[TL7-HVG (110-480VAC)]



Littelfuse®  
(Optional)  
[NEX-LF]



Glass Optics  
[G]

## Dimulator Stand-Alone LED Dimming Photocontrol



### Features

- Factory preset dimming - no selector switch
- 10 Year Warranty
- Compliant with ANSI C136.41 receptacle
- Optional constant all night dimming
- Adaptive lighting control with progressive intensities
- 40kV Surge Protection
- High voltage version available
- Advance time/date algorithm auto-adjusts for daylight savings
- Automatically synchronize to local time

### Bat Eye Technology

- Advanced light sensor, only reacts to sunlight
- Immune to LED and other artificial light
- No false activation (no cycling)
- May be oriented in any direction



Patent #9210746

## ELL Photocell Extra Long Life Photocontrol



### Features

- Designed to meet or exceed the life expectancy of LED fixtures.
- 10 Year Warranty
- 40kV Surge Protection
- High voltage version available

### Bat Eye Technology

- Advanced light sensor, only reacts to sunlight
- Immune to LED and other artificial light
- No false activation (no cycling)
- May be oriented in any direction



## RADIANT™ WIRELESS CONTROL SYSTEM



- Utility grade power monitoring.
- WiFi Mesh Receiver Nodes.
- Communication range is up to 1 mile line of sight.
- Control dimming and On/Off.
- Secure, over-the-air software upgrades.



- Manual/Remote/Web access to Nodes.
- Control up to 1000 Nodes.
- Weather protected.
- Optional, pre-configured 5 button switch to allow for control of all lighting (Central Base Station only).



Central Control Base  
Station  
(Optional)

or SimplySnap Controller

WiFi or LAN Network  
with  
browser based  
control interface

Optional Cloud Control  
with Verizon 4G LTE