

The LS9406LED is designed with a large flange and countersunk screw holes to secure the luminaire to any hard surface. Several beam angles are available, ranging from narrow to wide. Also an asymmetric wall wash lens option and flood / marker optics are available. Constructed in part from 316 Marine Grade Stainless Steel, this luminaire also comes with Lumascope proprietary **ElectroPolishPlus™** surface treatment as standard.

### Performance

Static White & Colour	Lumen Output (lm)	Efficacy (lm/W)	Peak Intensity (cd)
● 3,000 K (80 CRI)	169	60	1,989
● 4,000 K (80 CRI)	184	66	2,066
● Blue (470nm)	-	-	-

Static white lumen output values are based on 2W luminaire with 14° lens.

<b>Beam Angles</b>	14°, 20°, 30°, 10° x 40°, Flood
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### Electrical

<b>LED Power</b>	1W, 2W
<b>Consumption</b>	2.8W (maximum for 2W)
<b>Input Voltage</b>	Low Voltage    24V DC (International) 12-15V AC, 12-24V DC (North America)

### Control

<b>Protocols</b>	PWM (0-10V to PWM, DMX to PWM and DALI to PWM converters available)
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### Physical

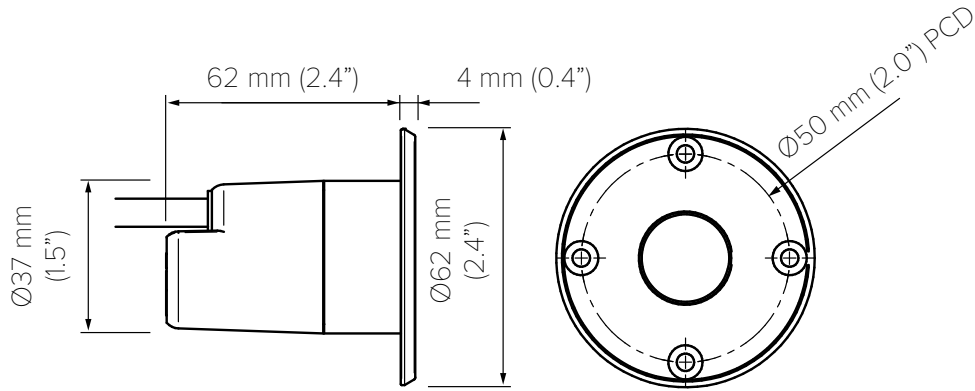
<b>Housing</b>	316 Marine Grade Stainless Steel bezel with polymer housing
<b>Installation</b>	Wall recessed
<b>Ambient Operating Temperature</b>	-20°C to +50°C (-4°F to 122°F)
<b>Surface Temperature</b>	≤65°C (≤149°F) <b>HumanTouch™</b> Compliant

### Certification & Compliance

<b>IP Rating</b>	IP68
<b>Certifications</b>	CE, ETL



Luminaire Dimensions



<b>LS9406LED</b>				<b>SS</b>				
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Power	Code
1W	1
2W	2

Static White & Colour	Code
3,000 K (80 CRI)	H6
4,000 K (80 CRI)	W4
Blue (470nm typical)	B4

Beam	Code
Narrow 14°	NR
Medium 20°	ME
Wide 30°	WD
Linear 10° x 40°	LN <sup>(1)</sup>
Flood	FL

(1) Linear with wall wash filter creates a linear horizontal beam.

Tilt	Code
Standard	U
Wall wash	W <sup>(1)</sup>

(1) Not applicable with FL beam.

Finish	Code
Stainless Steel	SS

Input Voltage (International)	Code
PWM Dimmable Driver, 24V DC	27 <sup>(1)</sup>

(1) Requires appropriate power supply

Cable Length	Code
2m	02
8m	08
15m	15
20m	20
25m	25

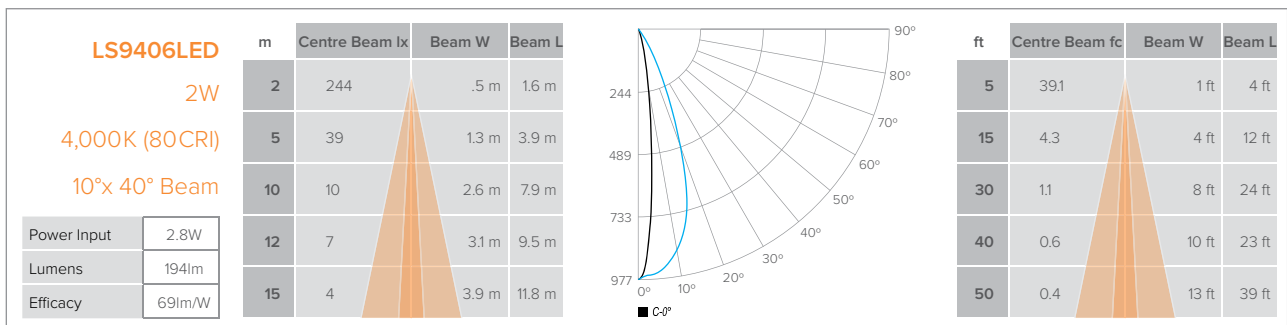
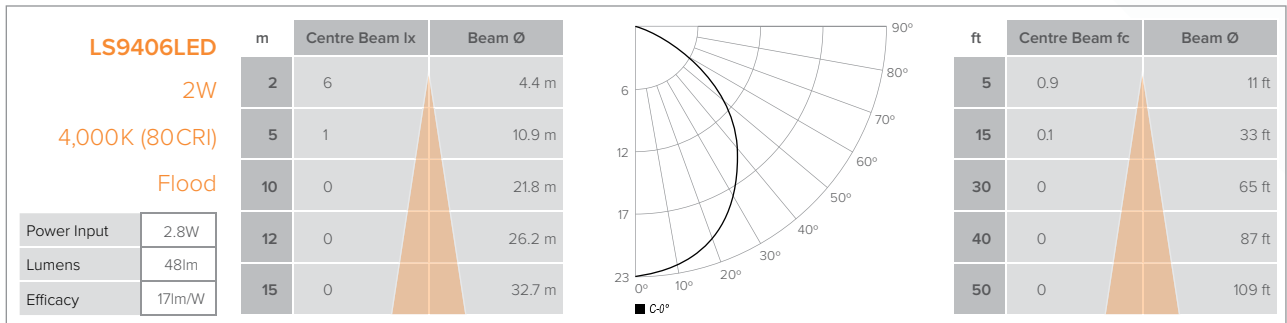
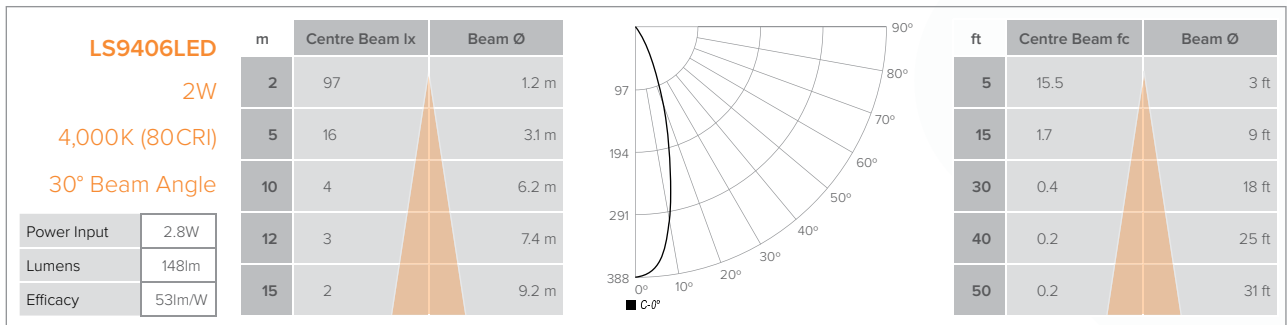
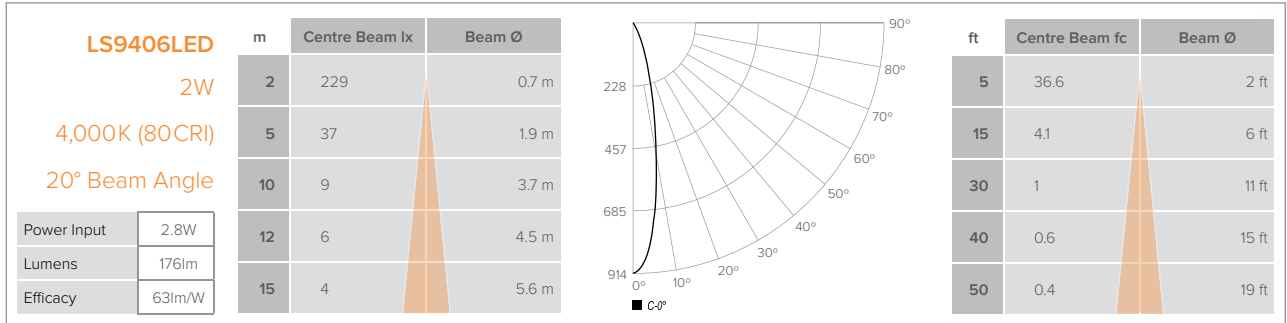
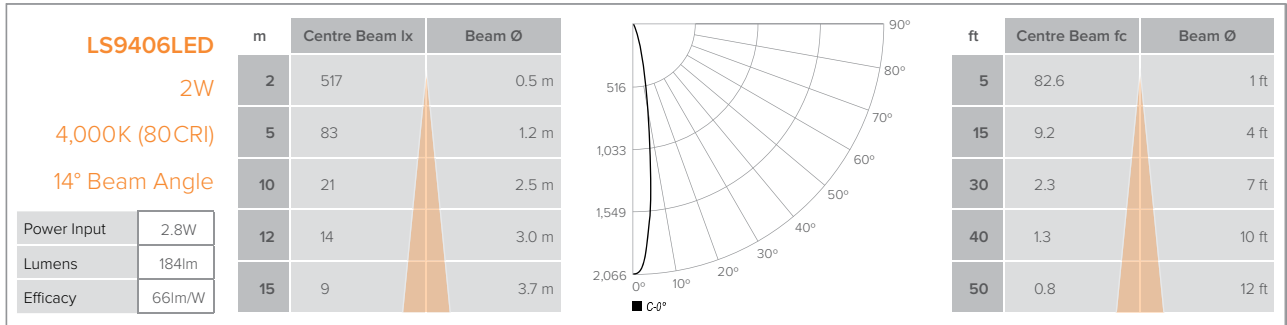
Input Voltage (North America)	Code
PWM Dimmable Driver, 12-15V AC, 12-24V DC	23 <sup>(1)</sup>

(1) Requires appropriate power supply

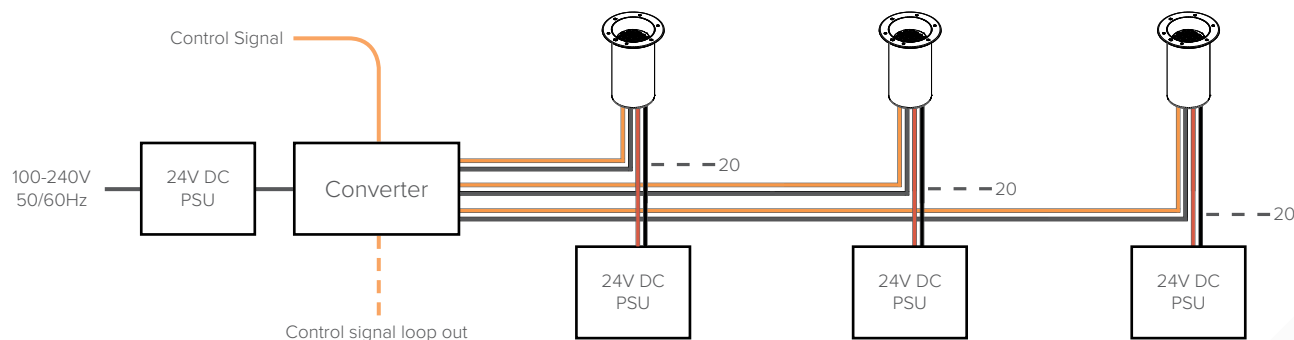
  

Cable Length	Code
6ft	006
26ft	026
48ft	048
65ft	065
82ft	082

Photometric data is based on test results from a NIST traceable testing lab. IES data is available at [www.lumascap.com](http://www.lumascap.com)  
 Note: No depreciation factor is applied to the data shown.



Wiring Diagram - Static Colour (DMX / DALI)



Control Protocols

DMX

For DMX control signal, use LS67100 DMX to PWM converter

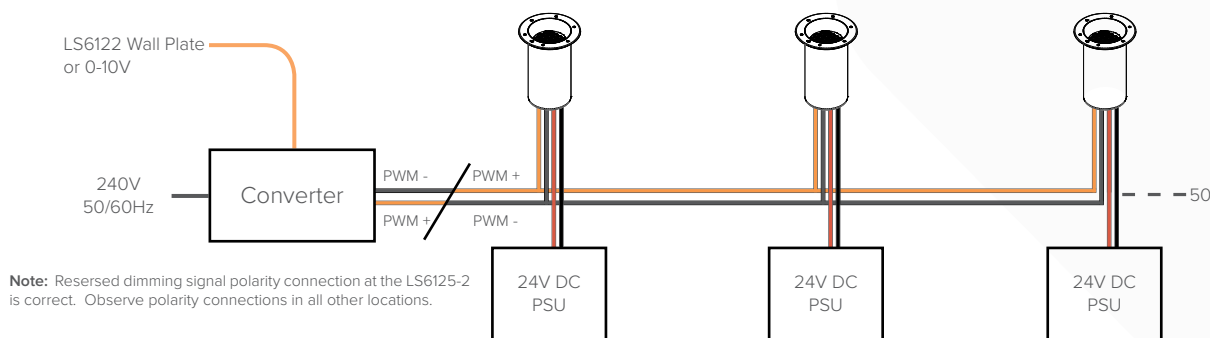
DALI

For DALI control signal, use LSLED-RGBDIM-DALI converter

Up to 20 luminaires per run under the following conditions:

- Up to three (3) individually addressed dimmable channels
- Up to 20 luminaires per dimmable channel
- Luminaires driven by integral LED drivers
- Luminaires powered through individual power supplies or
- Luminaires powered through LS67100 PWM controller only (up to 100W total)
- Refer to 'Maximum Circuit Load' table for circuit limitations
- Always observe local electrical codes for branch circuit current limitations

Wiring Diagram - Static Colour (0-10V)



Control Protocols

0-10V

For 0-10V control signal, use LS6125-2 0-10V to PWM converter

Up to 50 luminaires per run under the following conditions:

- Stand alone static colour dimming solution
- Up to 50 luminaires dimmed together
- Luminaires driven by integral LED drivers using LS6122 wall plate dimmer
- Luminaires powered through individual or shared power supplies
- Refer to 'Maximum Circuit Load' table for circuit limitations
- Always observe local electrical codes for branch circuit current limitations

Maximum Circuit Load

Compatibility with each driver is indicated by the value shown in the table, representing the maximum number of luminaires that may be powered from each driver based on a maximum cable run of 100m (328ft) and a trunk cable size of 3.3mm<sup>2</sup>. Please note, this does not take into consideration voltage drop beyond a distance of 100m or ampacity limits of the branch circuit. For assistance, please consult factory.

LSLED-24V Power Supplies			
Input Voltage	100-240V, 50/60Hz		
Output Voltage	24V DC		
Wattage	40W	100W	150W
LS9406LED, 1W	20	45	75
LS9406LED, 2W	10	26	36

NOTE: The above diagrams are intended to show electrical pathways between luminaires and ancillary device. These diagrams are not intended to show type or colour of cord / wire, luminaire input voltage rating, wire gauge or approved use of the cord / wire supplied with luminaires.

## Power Supply Specifications

### DC Power Supplies

#### LSLED-24V100W240

##### 24V DC Ripple Free Power Supply

Input	170-250V AC, 50/60Hz
Output	100W, 24V DC, 4.2A
Ambient Temperature Rating	-10°C to 50°C
Compliance	IEC61347-2-13, CE
IP Rating	IP66
Short Circuit Protection	Yes
Open Circuit Protection	Yes
Protection Class	Class II CE

#### LSLED-24V150W240

##### 24V DC Ripple Free Power Supply

Input	90-305V AC, 50/60Hz
Output	150W, 24V DC, 6.3A
Ambient Temperature Rating	-10°C to 50°C
Compliance	IEC61347-2-13, CE
IP Rating	IP66
Short Circuit Protection	Yes
Open Circuit Protection	Yes
Protection Class	Class II CE

#### LSLED-24V40W240

##### Electronic DC Power Supply - wall mounted

Input	100-240V AC, 50/60Hz
Rating	40W / 1.67A
Output	24V
Ambient Temperature Rating	-25°C to 60°C (-13°F to 140°F)
Output Circuits	1
Approvals	CE, EN60950-1, EN61347-2-13
IP Rating	IP65/67
Dimensions	H 171mm W 62mm L 37mm (H 6.7" / W 2.4" / L 1.5")
Weight	0.7kg (1.6lb)

## Control Related Equipment

#### LS6125-2

##### 0-10V to PWM translator - wall mounted

Input	100-240V AC, 50/60Hz
Rating	20W / 0.83A
Output	24V
Ambient Temperature Rating	-10°C to 50°C
Open Circuits	1
Control Protocol	0-10V
Approvals	CE
IP Rating	IP65/67
Dimensions	H 204mm W 166mm L 91mm (H 8.0" / W 6.5" / L 3.6")
Weight	0.5kg (1.1lb)

#### LS67100

##### DMX to PWM translator

Input	24V DC
Rating	4 x 60W max
Output	4 x 2.5A max
Open Circuits	4
Approvals	CE, UL
IP Rating	IP65
Dimensions	H 286mm W 117mm L 82mm (H 11.25" / W 4.6" / L 3.2")
Weight	0.2kg (0.5lb)

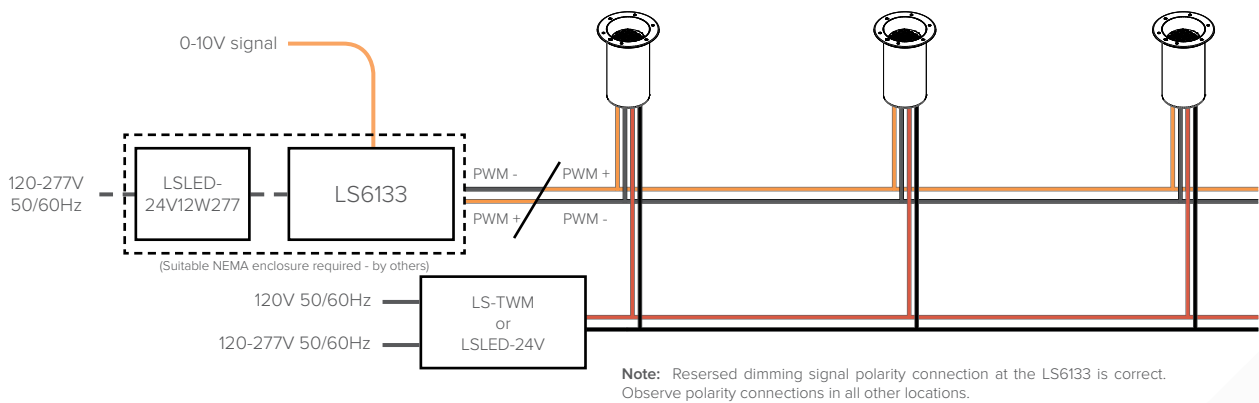
**Control Related Equipment cont...**

## LSLED-RGBDIMDALI

## DALI converter

Input	24V DC
Rating	30W max
Output	24V DC PWM (Inverted)
Ambient Temperature Rating	50°C
Output Channels	3
Control Protocol	DMX512A, DALI, DSI, RDM
Approvals	CE Ctick EN6137-1 , EN61347-2-13, IEC 62384
IP Rating	IP67
Weight	0.75kg

**Wiring Diagram - Static Colour (0-10V)**

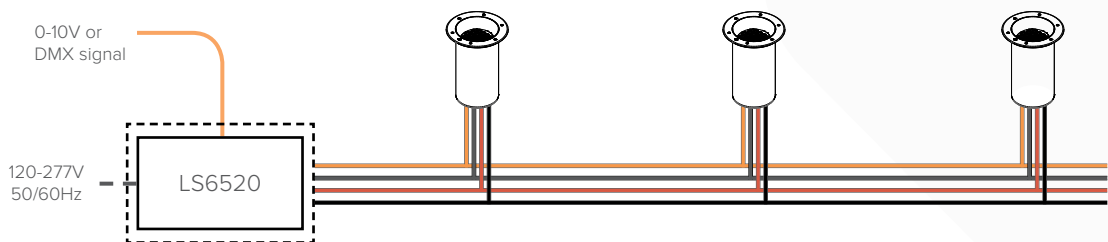


**Control Protocols**

0-10V For 0-10V control signal, use LS6133 0-10V to PWM converter

**Wiring Diagram - Static Colour**

Please note: The use of a GFCI may be required. Consult local wiring rules.



**Maximum Circuit Load**

Compatibility with each transformer or power supply is indicated by the value shown in the table, representing the maximum number of luminaires that may be powered from each transformer or power supply. Please note, this does not take into consideration voltage drop or ampacity limits of the branch circuit. In addition, dimming circuit total wire length must be kept under 328' (100m). For assistance, please consult factory.

	Transformer / Power Supplies								
	LS-TWM-1-300	LSLED-24V75W277	LSLED-24V96WD277	LSLED-24V 120 / 240 / 320 P09			LS6520		
Input Voltage	120V, 60Hz	120-277V 50/60Hz	120-277V 50/60Hz	120-277V 50/60Hz			100-277V, 50/60Hz		
Output Voltage	12/13/14V, 60Hz	24V DC	24V DC	24V DC			24V DC		
Wattage	1 x 300W circuit	75W	96W	120W	240W	320W	120W	240W	320W
LS9406LED, 1W	96	40	60	72	145	195	72	145	195
LS9406LED, 2W	54	20	30	36	73	98	36	73	98

NOTE: The above diagrams are intended to show electrical pathways between luminaires and ancillary device. These diagrams are not intended to show type or colour of cord / wire, luminaire input voltage rating, wire gauge or approved use of the cord / wire supplied with luminaires.

### Transformer / Power Supply Specifications

#### Class 2 LED Power Supplies

##### LSLED-24V96WD277

Electronic DC Power Supply - wall mounted

Input	120-277V, 50/60Hz
Output	24V DC, 4A max
Efficiency	86% typ.
Ambient Temperature Rating	-22°F to 140°F (-30°C to 60°C)
Connections	6 x 1/2" entries (3 in / 3 out)
UL Classification	UL 8750
Location	Dry / Damp location only
IP Rating	IP66 (NEMA 3)
Dimensions	<b>H 1.3" W 3.0" L 11.46"</b> (H 33mm / W 76mm / L 291mm)

##### LSLED-24V75W277

Electronic DC Power Supply - wall mounted

Input	120-277V, 50/60Hz
Output	24V DC, 3.13A, (0.05A min)
Efficiency	
Ambient Temperature Rating	-40°F to 140°F (-40°C to 60°C)
Connections	2 x 1/2" entries (in / out)
UL Classification	Class 2, UL1012 / 1585, UL1310
Location	Dry / Damp / Wet locations
IP Rating	IP66 (NEMA 3)
Dimensions	<b>H 1.67" W 2.95" L 11.22"</b> (H 42mm / W 75mm / L 285mm)

#### Low Voltage DC Power Supplies

##### LS6520

Power Unit for Wet Locations

Input	100-277V, 50/60Hz
Output	24 or 30V DC
Output Circuits	1
Approvals	UL2108, CSA C22.2 No. 250.0
IP Rating	IP65, suitable for wet locations
Dimensions	<b>H 5.3" W 13.4" D 9.3"</b> (H 134mm / W 341mm / D 236mm)
Weight	13.2lb (6.0kg)

##### LSLED-24V120WP09

Electronic DC Power Supply - wall mounted

Input	120-277V, 50/60Hz
Rating	120W
Output	24V or 30V
Ambient Temperature Rating	-40°F to 122°F (-40°C to 50°C)
Connections	2 x 3/4" entries (power in / out) 2 x 3/4" entries (low voltage out)
UL Classification	ANSI / UL2018, CSA C22.2 No. 250.0 - Listed Power Unit
Location	Dry / Damp / Wet locations
IP / NEMA Rating	1, 3R, 4X, 6P, 12
Dimensions	<b>H 4.47" W 11.35" D 9.41"</b> (H 120mm / W 288mm / D 293mm)
Weight	7.5lb (3.4kg)

##### LSLED-24V240WP09

Electronic DC Power Supply - wall mounted

Input	120-277V, 50/60Hz
Rating	240W
Output	24V or 30V
Ambient Temperature Rating	-40°F to 122°F (-40°C to 50°C)
Connections	2 x 3/4" entries (power in / out) 2 x 3/4" entries (low voltage out)
UL Classification	ANSI / UL2108 Wet Location Listed
Location	Dry / Damp / Wet locations
IP / NEMA Rating	1, 3R, 4X, 6P, 12
Dimensions	<b>H 5.22" W 13.41" D 11.43"</b> (H 133mm / W 341mm / D 290mm)
Weight	10.9lb (5.0kg)

##### LSLED-24V320WP09

Electronic DC Power Supply - wall mounted

Input	120-277V, 50/60Hz
Rating	320W
Output	24V or 30V
Ambient Temperature Rating	-40°F to 104°F (-40°C to 40°C)
Connections	2 x 3/4" entries (power in / out) 2 x 3/4" entries (low voltage out)
UL Classification	ANSI / UL2108 Wet Location Listed
Location	Dry / Damp / Wet locations
IP / NEMA Rating	1, 3R, 4X, 6P, 12
Dimensions	<b>H 5.22" W 13.41" D 11.43"</b> (H 133mm / W 341mm / D 290mm)
Weight	12.1lb (5.5kg)



**Transformers for Landscape Lighting Applications**

LS-TWM-1-300

Magnetic Transformer - wall mounted

Input	120V
Rating	300W
Output	12 / 13 / 14 / 15V
Output Circuits	1
Protection	Electrostatic shield, magnetic breaker
Approvals	UL, CUL
NEMA Rating	3R
Construction	Stainless steel
Dimensions	H 17.6" W 6.8" D 6.19" (H 447mm / W 173mm / D 157mm)
Weight	27lb (12.3kg)

**Control Related Equipment**

LS6133

0-10V to PWM translator - NEMA enclosure required (by others)

Input	24V DC
Rating	96W max
Output	4A max
Output Circuits	1
Approvals	UL, CUL Recognised, Class 2
IP Rating	IP66
Dimensions	H 5.2" W 1.3" D 1" (H 132mm / W 33mm / D 25mm)
Weight	0.2lb (0.1kg)

LSLED-24V12W277

Electronic DC Power Supply - NEMA enclosure required (by others)

Input	120-277V, 50/60Hz
Rating	12W / 0.5A
Output	24V DC
Output Circuits	1
Approvals	UL, CUL Recognized, Class 2
IP Rating	IP66
Location	Wet location
Dimensions	H 3.35" W 1.42" D 0.91" (H 85mm / W 36mm / D 23mm)
Weight	0.282lb (0.1kg)