

Project		Location	
Contact		Date	
Part#		Fixture	

OptiMatrix™

72 Diode Flexible Light Sheet



Description

Extremely versatile in low-depth diffusion applications that require particularly uniform light dispersion, and can fold or bend to fit curved surfaces. The product also boasts the smallest cuttable size in the industry (1 LED), tight pitch LEDs that eliminate hotspots, and low power requirements that generate a very low heat signature.

Applications

- Backlighting
- Backlit stone
- Backlit graphics
- Architecture features
- Unique/curved surfaces



Cut And Fold To
Desired Shape



Shallow
Diffusion Depth



High Efficacy
100 Lumens / Watt



Easy
Installation

Key Features

- Can fold or bend to fit curved surfaces
- OptiMatrix™ is ideal for applications that require particularly uniform light distribution
- No visible brightness differences between sheets and voltage drops
- Low power consumption and operating temperature, requiring only 12 W/Sheet
- Smallest cuttable size in the industry (1 diode cuttable)
- Great in low depth diffusion applications
- Can be easily mounted with screws, or 3M adhesive backing, and can be cut onsite
- CRI of 85+

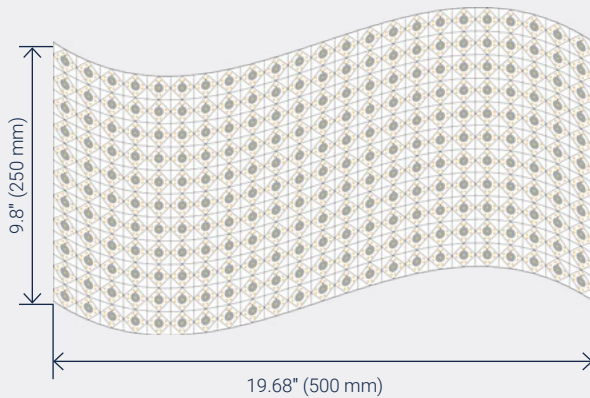
Specifications

Performance		OptiMatrix™
Part Number	#430900	
CRI	85+	
Color Temperature	4100K, 5300K, 6300K	
Lumens	1200lm / sheet	
Efficacy	100 lm/W	
Lumen Maintenance	L70@~102000 hrs (LM80)	
Diode Pitch	1.65" (42 mm)	
LED Count	72 LED /sheet	
Operating Temp.	-30° C (-22° F) ~ +40° C (+104° F)	
IP Rating	IP22	
Environment	Dry only (indoor)	
UL / ETL	UL Listed (E346146), CE, RoHS	
Warranty	5 Years	
Mechanical		
Thickness	Bumper height - 8 mm • Overall depth of the system (including bumper) - 8.75 mm	
Sheet Size	19.68" L x 9.8" W 500 mm L x 250 mm W	
Cuttable Size	1.65" x 1.65" 42 mm x 42 mm	
Weight	0.45 lb /sheet (0.20 kg /sheet)	
Connectivity	Maximum tiling of 7 full sheets or up to 90W - based on 96W driver	
Mounting	3M adhesive tape on the back of each sheet, screws	
Electrical		
Input Voltage	24V DC	
Power Consumption	12W /sheet	
Wire size	20 AWG, 2 wire	
Wiring Options	20 AWG cable with 2 pin connectors and 2.1/5.5 mm DC barrel connector	
Connector	12 integrated 2 pin connector blocks /sheet	

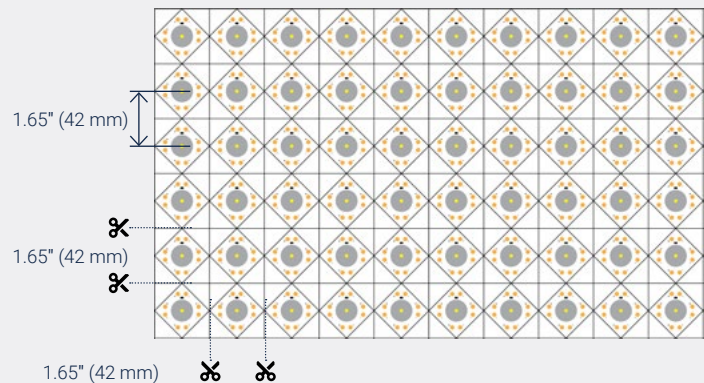
Customization

Sheet Customization Options

Sheet Shape & Size

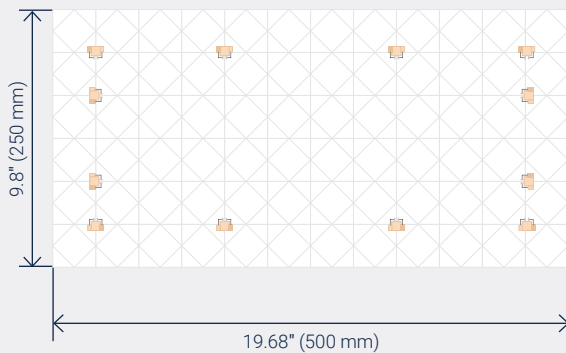


LED Pitch and Cutting Length

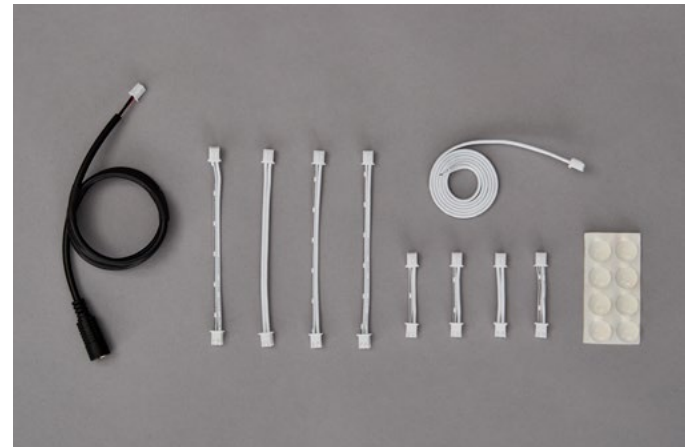


Connections

12 connector points

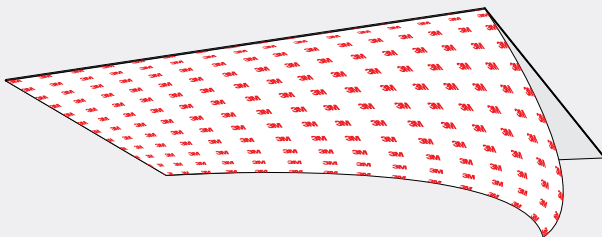


Accessories



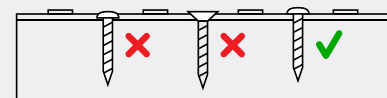
Mounting Options

Option 1: 3M adhesive back tape



After the fit and operation tests are complete, use the appropriate method (or combination of) to mount the light sheets to the mounting surface. Omnify recommends the use of the 3M tape for all mounting as it does not harm the light sheets.

Option 2: Mechanical Fasteners



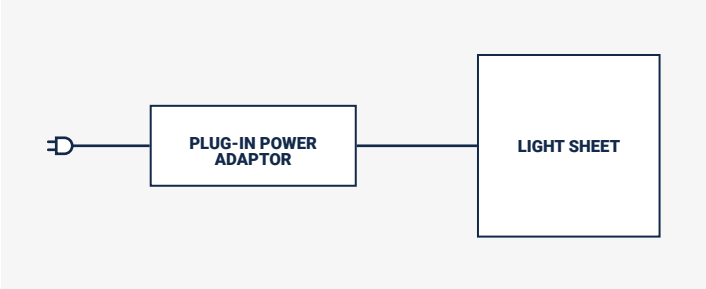
Mechanical Fasteners: Penetrations through the light sheet must be made inside the squares with the cross. For applications that are suspended, use plastic fasteners and washers and allow appropriate spacing to avoid sagging. Use plastic pan head, coned, or round head screws (not tapered screws like wood or drywall). Never screw the fastener so much that it causes deformation in the sheet.

Customization

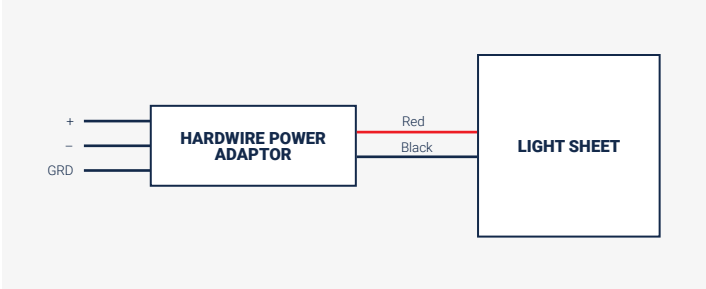
Wiring Options

Determine your system components, including a power adaptor, as well as optional dimmer and controller. Use only UL certified power adaptors with the power output that coordinates with your input voltage.

Using a Plug-in Power Adaptor



Wiring with Hardwire Power Adaptors



- 1. Turn off power to your system at the main breaker
- 2. Install your system components. Refer fo wiring guidelines for each component to build your system
- 3. Check connections and turn on power at the main breaker

Configurator

OptiMatrix™

Part #	Color Temperature	Voltage	Wattage/ft
430900 – OptiMatrix™	410 – 4100K	24 – 24V DC	12 – 12W /sheet
	530 – 5300K		
	630 – 6300K		

Orders can be placed by choosing all the options and configuration parameters, which generates an order code. Put your order code together by putting the codes from the above tables you would like to have in the same order from above into each cell below.

Order Code Example

Part # Color Temp. Voltage Wattage

430900-410-24-12

Breakdown: Optimatrix™ – 4100K White Color Temperature – 24V DC Input voltage –12W / sheet Wattage.

Accessories

Compatible Power Adaptors

Plug-in Power Drivers

Part Number	AC Input Range	DC Voltage	Rated Current	Rated Wattage
950025-24-096	100V AC ~ 240V AC	24V DC	4.0A	96W
950033-24-036	100V AC ~ 240V AC	24V DC	1.5A	36W
950035-24-096	100V AC ~ 240V AC	24V DC	4.0A	96W
950036-24-060	100V AC ~ 240V AC	24V DC	2.5A	60W

Hardwire Power Drivers

Part Number	AC Input Range	DC Voltage	Rated Current	Rated Wattage
950037-24-060	100V AC ~ 277V AC	24V DC	2.5A	60W
950038-24-096	100V AC ~ 277V AC	24V DC	4.0A	96W
950039-24-150	100V AC ~ 277V AC	24V DC	6.25A	150W

5-in-1 Dimmable Power Drivers

Part Number	AC Input Range	DC Voltage	Rated Current	Rated Wattage
951004-24-096	100V AC ~ 277V AC	24V DC	4.0A	96W
951006-24-192	100V AC ~ 277V AC	24V DC	2 x 4.0A	2 x 96W

Safety Disclaimer

Determine your system components, including a power adaptor, as well as optional dimmer and controller. Use only UL certified power adaptors with the power output that coordinates with your input voltage. Do not apply 24V DC to 12V DC panels, as within seconds the result may be burned LEDs or fire. Look for your voltage tags at the end of the power cord.

Accessories

Compatible Power Controllers

Rotary Style Dimming Controller

Part Number	DC Voltage	Channels	Dimming Range	Rated Wattage
970002	12V / 24V DC	N/A	PWM	96W / 192W

Inline Plug & Play Dimming Controller

Part Number	DC Voltage	Channels	Dimming Range	Rated Wattage
970014	12V / 24V DC	N/A	PWM	48W / 96W

Inline Dimming Controller with Remote

Part Number	DC Voltage	Channels	Dimming Range	Rated Wattage
970007	12V / 24V DC	N/A	PWM	72W / 144W

LED Dimming Controller Module

Part Number	DC Voltage	Channels	Dimming Range	Rated Wattage
970001	12V / 24V DC	N/A	0V – 10V	60W / 96W

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