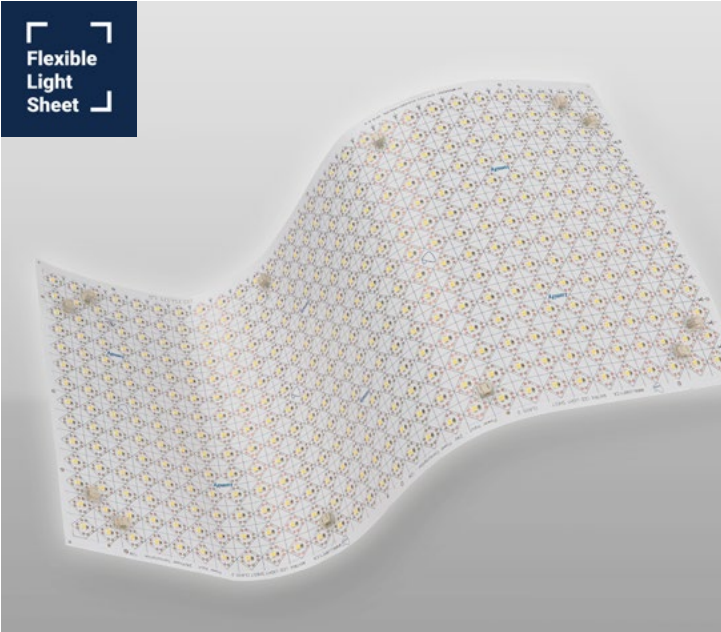


Project		Location	
Contact		Date	
Part#		Fixture	

Matrix™ Wet Rated

420 Diode Indoor/Outdoor Flexible Light Sheet

Flexible
Light
Sheet



Description

Extremely versatile in indoor, outdoor, and low-depth diffusion applications, can bend or fold to fit curved surfaces, and boasts the smallest cuttable size in the industry (1 LED). The Product also eliminates hot spots with tight pitch LEDs, and has low power requirements, generating a very low heat signature.

Applications

- Backlighting
- Backlit stone
- Backlit graphics
- Architecture features
- Unique or curved surfaces
- Outdoor or indoor applications


5 YEAR WARRANTY

ROHS


CE

IP65

UL LISTED




Manufactured in
North America




Cut And Fold To
Desired Shape



Shallow
Diffusion Depth



Suitable for
Wet Locations



Uniform
Lighting



Easy
Installation

Key Features

- Can fold or bend to fit curved surfaces
- Wet-rated - conforms to IP65 standard for the sheet.*
- Low power consumption and operating temperature, requiring only 12 W/Sheet
- Smallest cuttable size in the industry (1 diode)
- With diffusion depth starting at 0.5", it's great in low-depth diffusion applications
- CRI of 85+
- Even lighting throughout sheets, with no visible brightness differences between sheets and voltage drops.
- Can be easily mounted with screws, or 3M adhesive backing, and can be cut onsite

Specifications

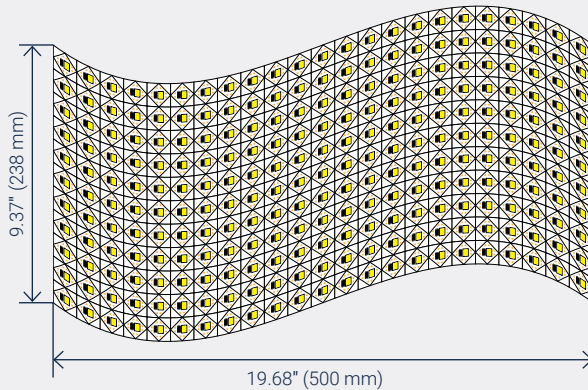
Performance		Matrix™ Wet Rated
Part Number	#431100	
CRI	85+	
Color Temperature	4100K, 5300K, 6500K	
Lumens	1600lm / sheet	
Efficacy	>100lm/W	
Lumen Maintenance	L70@~102000 hrs (LM80)	
Diode Pitch	0.67" (17 mm)	
LED Count	420LEDs / sheets	
Operating Temp.	-30° C (-22° F) ~ +50° C (+122° F)	
IP Rating	IP65	
Environment	Wet-rated - conforms to IP65 standard for the sheet (To maintain wet rating, we reccomend applying silicone over all connection points, and also over any area that has been cut)	
UL / ETL	UL Listed (E346146)	
Warranty	5 Years	
Mechanical		
Thickness	Bumper height - 8 mm • Overall depth of the system (including bumper) - 8.75 mm	
Sheet Size	9.375" L x 19.6875" W 238 mm L x 500 mm W	
Cutable Size	0.67" x 0.67" 17 mm x 17 mm	
Weight	0.3 lb /sheet (0.13 kg /sheet)	
Maximum Size	Max. 7 sheets (96W driver)	
Mounting	3M adhesive backing, Mounted with screws	
Electrical		
Input Voltage	24V DC	
Power Consumption	12W /sheet	
Wire size	20 AWG, 2 wire	
*Accessories	Includes 4x jumper cables with 2-pin connector(length:30 mm) 4x jumper cables with 2-pin connector(length:95 mm) 1x hardwire cable with 2-pin connector (length:610 mm) 1x adapter cable with 2.1 mm/5.5 mm female barrel connector 8x bumpers	
Connector	12 integrated 2 pin connector blocks /sheet	

*Accessories included per sheet

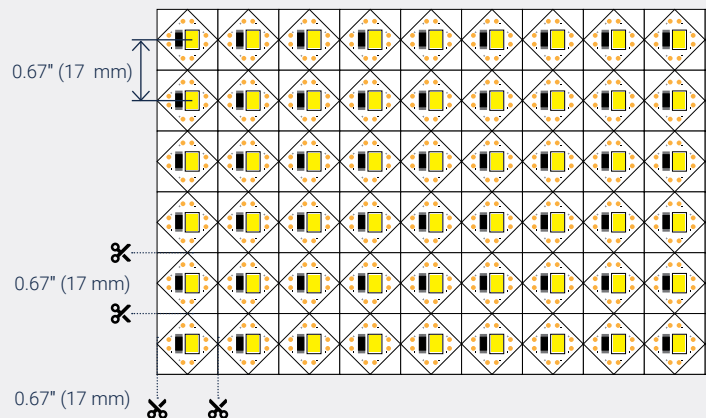
Customization

Sheet Customization Options

Sheet Shape & Size

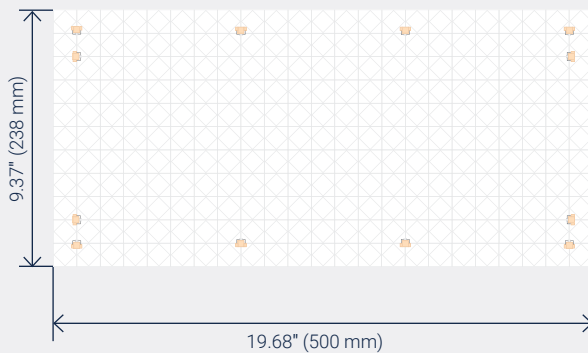


LED Pitch and Cutting Length

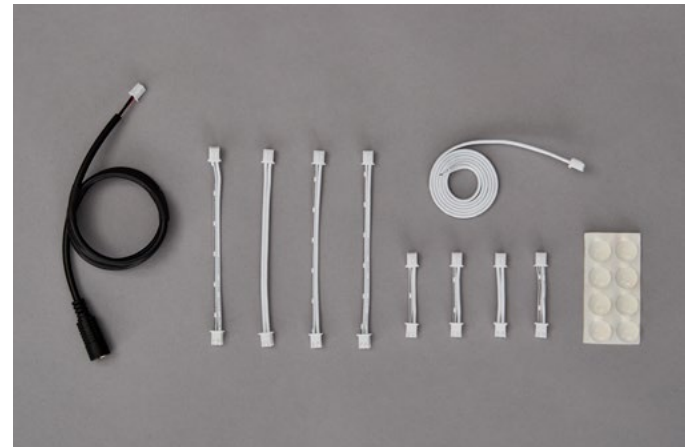


Connections

12 connector points

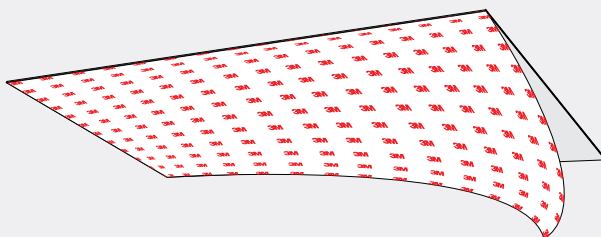


Accessories



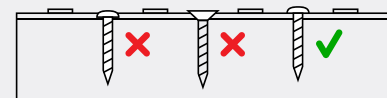
Mounting Options

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



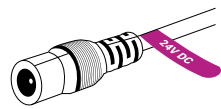
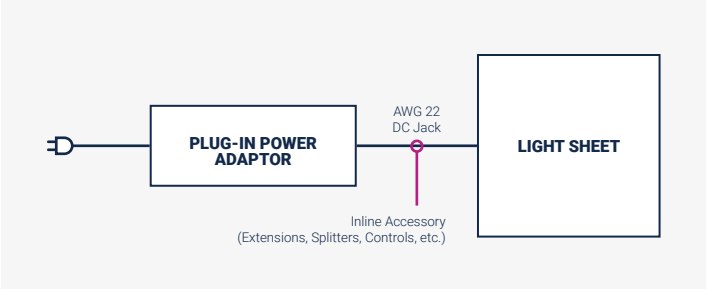
Mechanical Fasteners: Penetrations through the light sheet must be made inside the squares with the cross. For applications that are suspended, use plastic fasteners and washers and allow appropriate spacing to avoid sagging. Use plastic pan head, coned, or round head screws (not tapered screws like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

Customization

Wiring Options

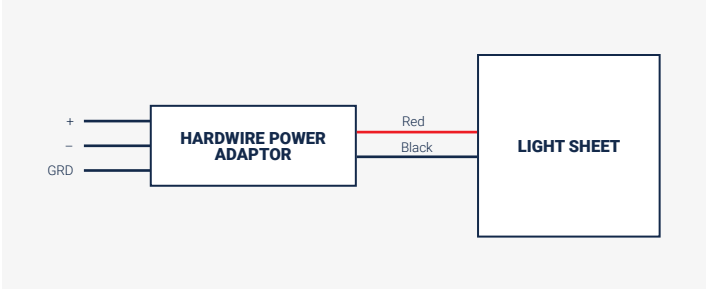
Determine your system components, including a power adaptor, as well as optional dimmer and controller. Use only UL certified power adaptors with the power output that coordinates with your input voltage.

Using a Plug-in Power Adaptor



Use a plug-in adaptor to connect the Light Guided Panel to your power source via DC Jack.

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

Matrix™

Part #	Color Temperature	Voltage	Wattage/ft
431100 – Matrix™ Wet Rated	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.

Part # Color Temp. Voltage Wattage

Order Code Example

431100-410-24-12

Breakdown: Matrix™ Wet Rated Light Sheet – 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

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.