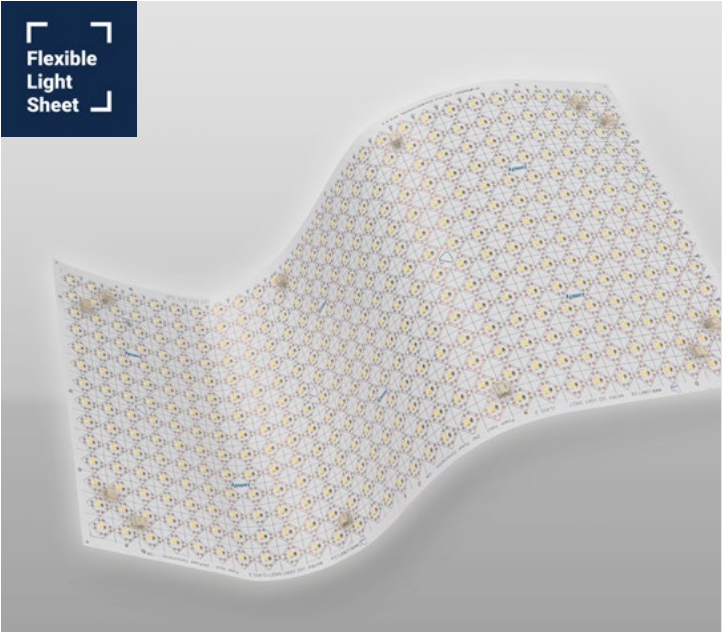


Project		Location	
Contact		Date	
Part#		Fixture	

Matrix™

420 Diode Flexible Light Sheet

Flexible Light Sheet



Description

Extremely versatile with a depth diffusion starting at 0.5", the smallest cuttable size in the industry (1 LED). It can fold or bend to fit curved surfaces. This Product also boasts tight pitch LEDs that eliminate hotspots, and low power requirements, generating a very low heat signature.

Applications

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

✓ 5 YEAR WARRANTY

ROHS

CE

IP22

UL US LISTED




Cut And Fold To Desired Shape



Shallow Diffusion Depth



Uniform Lighting



Easy Installation

Key Features

- Can fold or bend to fit curved surfaces
- Low power consumption and operating temperature, requiring only 12 W/Sheet
- Smallest cuttable size in the industry (1 diode cuttable)
- 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

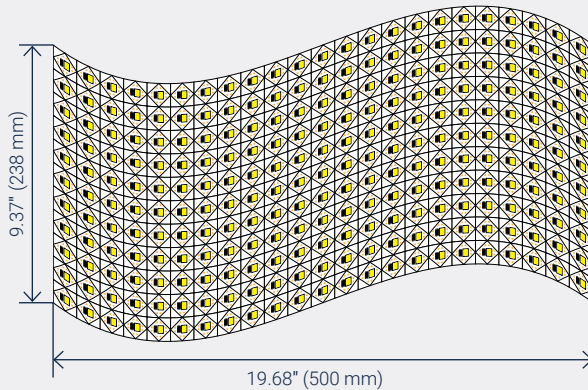
Performance		Matrix™	Matrix™ Tunable
Part Number	#430600		
CRI	85+		
Color Temperature	2700k, 3000k, 3500k, 4100k, 5300k, 6300k	From Warm 2700K to Cool 6300K	
Lumens	1600 lm / sheet	Warm 600 lm/sheet Cool 650 lm/sheet Warm + Cool 1200 lm/sheet	
Efficacy	>100 lm/W		
Lumen Maintenance	L70@~102000 hrs (LM80)		
Diode Pitch	0.67" (17 mm)	0.79" (20 mm)	
LED Count	420 LED /sheet (MCADAM)	720 LED /sheet	
Operating Temp.	-30° C (-22° F) ~ +40° C (+104° F)		
IP Rating	IP22		
Environment	Dry / Damp location only (indoor)		
UL / ETL	UL Listed (E346146), CE, RoHS		
Warranty	5 Years		
Mechanical			
Thickness	Overall thickness of the sheet (including bumper) - 8.75 mm (Bumper height - 8 mm)		
Sheet Size	19.68" x 9.37" 500 mm x 238 mm		
Cuttable Size	0.67" x 0.67" 17 mm x 17 mm	0.67" x 0.79" 17 mm x 20 mm	
Weight	0.3lb/sheet		
Maximum Size	Maximum tiling up to 7 sheets-based on 96W driver		
Mounting	Mounted with screws, 3M adhesive backing		
Electrical			
Input Voltage	24V DC		
Power Consumption	12W/sheet	11W/sheet	
Wire size	20 AWG, 2 wire	22 AWG, 3 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	Includes 4x jumper cables with 3-pin connector(length:30 mm) 4x jumper cables with 3-pin connector(length:95 mm) 1x hardwire cable with 3-pin connector (length:610 mm) 8x bumpers	
Connector	12 integrated 2 pin connector blocks /sheet	12 integrated 3 pin connector /sheet	

*Accessories included per sheet

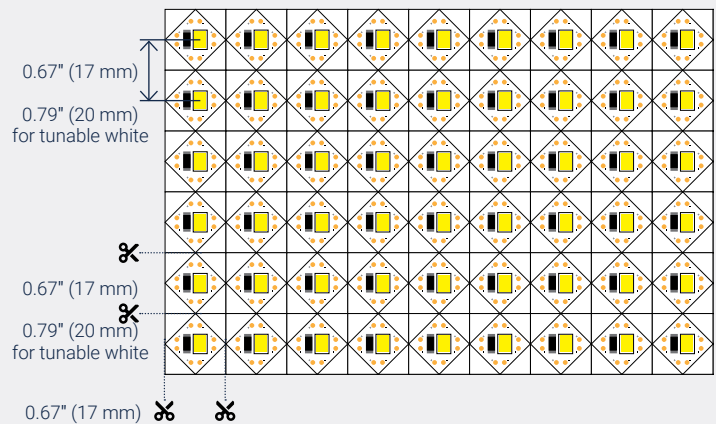
Customization

Sheet Customization Options

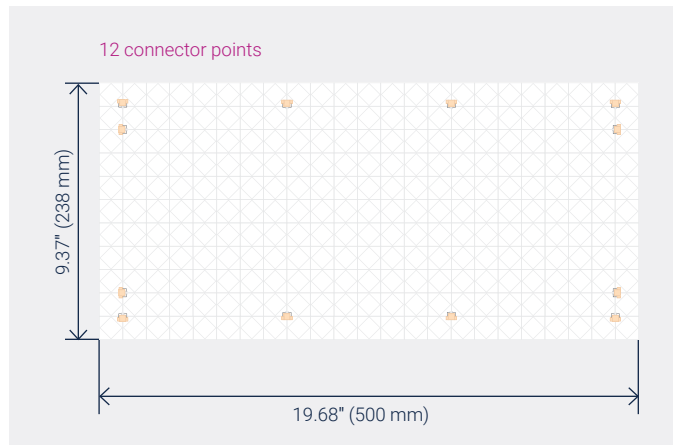
Sheet Shape & Size



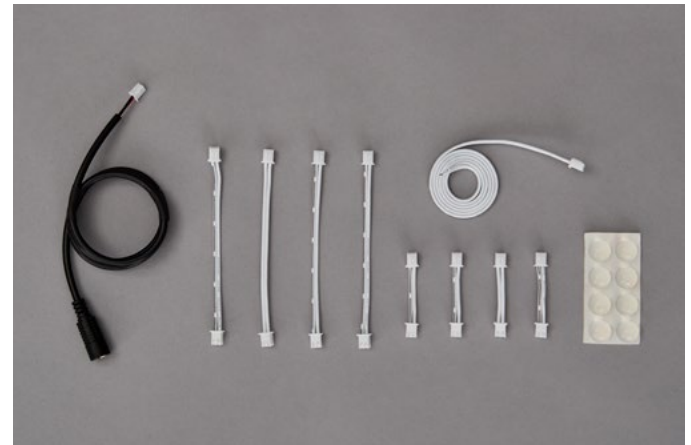
LED Pitch and Cutting Length



Connections

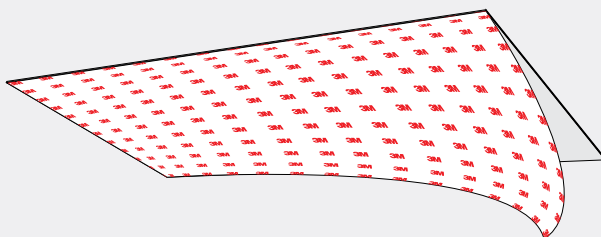


Accessories



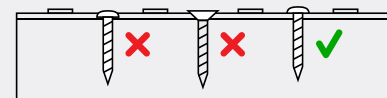
Mounting Options

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



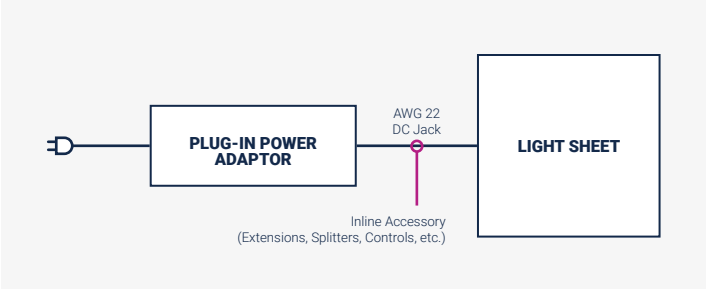
Mechanical Fasteners: Penetrations through the light sheet must be made inside the squares with the cross. For applications that are suspended, use plastic fasteners and washers and allow appropriate spacing to avoid sagging. Use plastic pan head, coned, or round head screws (not tapered screws like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

Customization

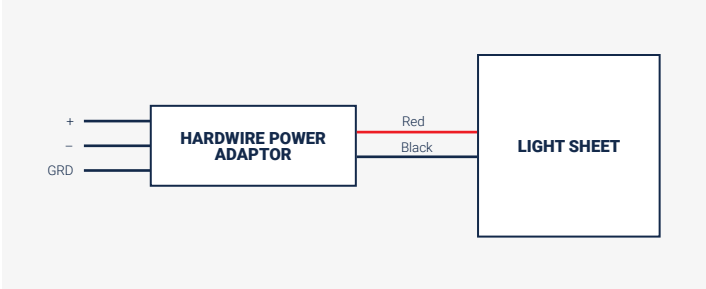
Wiring Options

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

Matrix™

Part #	Color Temperature	Voltage	Wattage/ft
30600 – Matrix™ Sheet	004 – -Tunable white	24 – 24V DC	12 – 12W /sheet
	270 – 2700K		11– 11W/sheet(tunable white)
	300 – 3000K		
	350 – 3500K		
	410 – 4100K		
	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

430600-270-24-12

Breakdown: Matrix™ Flexible Light Sheet – 2700K 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

RF Power Driver for Tunable White

Part Number	AC Input Range	DC Voltage	Rated Current	Rated Wattage
951029	120V AC	24V DC	3.75A	90W

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

RF Tunable White Wall Controller

Part Number	DC Voltage	Channels	Dimming Control	Rated Wattage
970043	12V – 24V DC	N/A	PWM	700W Max.

DMX Controller / Decoders

Part Number	DC Voltage	Channels	Dimming Control	Rated Wattage
970032	12V – 24V DC	4 CH	N/A	96-288W /Channel
970033	12V – 24V DC	5 CH	N/A	96-192W /Channel

Power Repeater

Part Number	DC Voltage	Channels	Dimming Control	Rated Wattage
970037	12 – 36V DC	4 CH	N/A	60 – 180W /Channel

DMX Wall Controller

Part Number	DC Voltage	Channels	Dimming Control	Rated Wattage
970041	12V – 24V DC	2 CH	Tunable White (1–100%)	360W Max.

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.