



4mm / 6mm / 8mm Embedded LED dimmable light panel

Part#: 4 mm **121414** • 6 mm **121614** • 8 mm **121814** • RGB 8mm **121815** • RGBW 8mm **121817** • Tunable 8mm **121812**

Job Information <i>Fill out project details for this product below</i>			
Project		Location	
Contact		Date	
Product Number		Fixture Type	

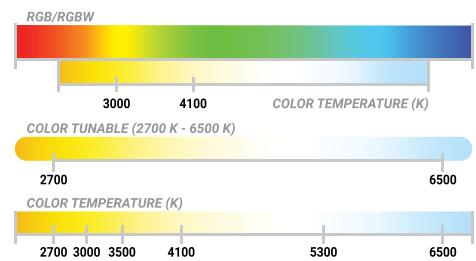
With state-of-the-art technology and embedded design, the flagship Omnisheet provides the most consistent light output and true-to-life color rendering.



APPLICATIONS

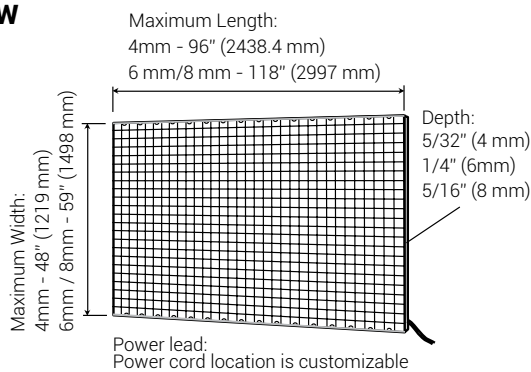
- Backlighting
- Large Formats
- Backlit Stone
- Backlit Graphics

COLOR TEMPERATURE

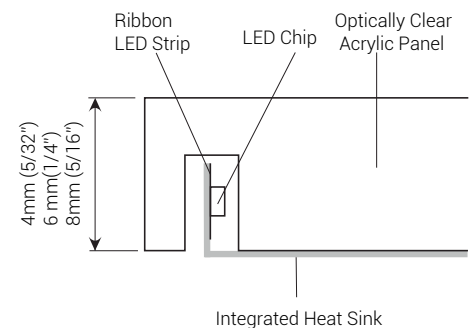


OVERVIEW

FRONT VIEW



PROFILE VIEW





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SPECIFICATIONS

PHYSICAL SPECIFICATIONS

Part Number	4 mm - 121414 6 mm - 121614 8 mm - 121814 RGB 8mm - 121815 RGBW 8mm - 121817 Tunable 8mm - 121812
Series	LLP
Chip	OmniChip
CRI	≥ 90 (4 mm) • ≥ 95 (6 mm/8 mm)
Color Temperature	4 mm 2700 K • 3000 K • 3500 K • 4100 K • 5300 K • 6500 K 6 mm/8 mm 2700 K • 3000 K • 3500 K • 4100 K • 5300 K • 6500 K • Tunable (2700K-6500K) • RGB • RGBW (3000K / 4100K)
Illumination	Single Face (SFI) • Double Face (DFI)
Operating Temperature	-30 °C (-22 °F) ~ +40 °C (+104 °F)
Environment	Dry / Damp location only (indoor)
Thickness	5/32" (4 mm) • Standard 5/16" (8 mm) & 1/4" (6 mm) • Standard, Tunable (2700K-6500K), RGB 5/16" (8 mm), RGBW 5/16" (8 mm)
Minimum Size	2" (50 mm) L x 2" (50 mm) W
Maximum Size	4 mm - 48" (1219 mm) W x 96" (2438.4 mm) L 6 mm/8 mm - 59" (1498 mm) W x 118" (2997 mm) L
Weight	6mm 1.46lbs / sq ft (7.15 kg / sq m) • 8mm 1.95 lbs / sq ft (9.54 kg / sq m)
Fire Rating	Meets UL94V-0 standard

ELECTRICAL SPECIFICATIONS

Input Voltage	12V DC • 24V DC
Power Consumption	2.4 W/ft (Low-Wattage) • 4.4 W/ft (Standard) • 5.5 W/ft (Tunable) using Controllers (4 W/ft per each channel, 8W/ft Max) • 4.4 W/ft Max. (RGB) • 4.9W/ft Max. (RGBW)
Wire Size	20 AWG 2 wire (Standard) • 22 AWG 3 wire (Tunable) • 22 AWG 4 wire (RGB) • 22 AWG 5 wire (RGBW)
Wiring	Each panel must have direct connection to power supply. Do not wire panels in series. Maximum wire length 20 ft (6 m) to avoid voltage drop
Connector	Standard 5' (1500 mm), optional 10' (3000 mm) • 2.1 / 5.5 mm barrel plug (Standard) • Bare wire (Tunable, RGB & RGBW)
Certification	UL listed (E346146)

*LED Kelvin temperatures listed in this literature have been derived from raw LED data. Actual Kelvin ratings can vary +/-200 K based upon environmental conditions including but not limited to inclusion into LGPs and the use of diffusion materials. A precise ANSI bin control system is utilized to help maintain LED conformity and to minimize variances



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LED TESTING DATA

4 mm - COLOR RENDERING INDEX • CRI: 90

R1	R2	R3	R4	R5	R6	R7	R8	R9	R10	R11	R12	R13	R14	R15
92	94	94	90	90	89	95	87	67	84	89	62	93	96	91

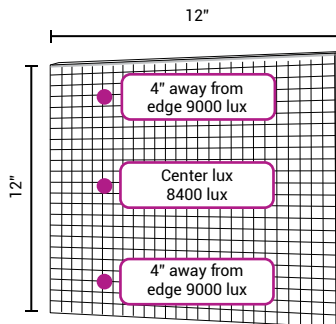
6 mm / 8 mm - COLOR RENDERING INDEX • CRI: 95

R1	R2	R3	R4	R5	R6	R7	R8	R9	R10	R11	R12	R13	R14	R15
98	96	92	94	99	93	95	97	95	91	93	82	97	95	98

TYPICAL SURFACE BRIGHTNESS MEASUREMENTS

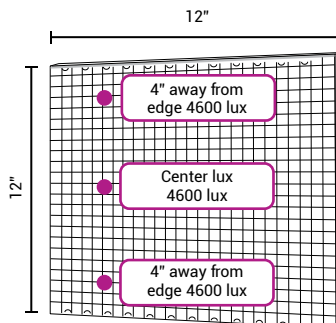
Brightness readings are for reference only. Actual reading may differ for different LEDs, LGPs or even different meters.

4 mm Panel

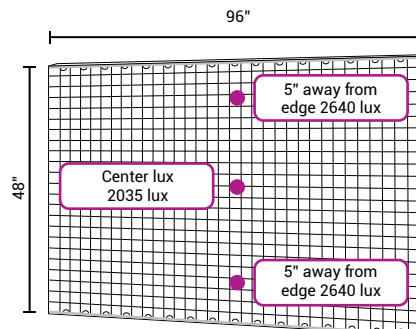


12" (304.8 mm) x 12" (304.8 mm) Omnisheet with 5300 K LEDs lit along 2 long edges (8 W)

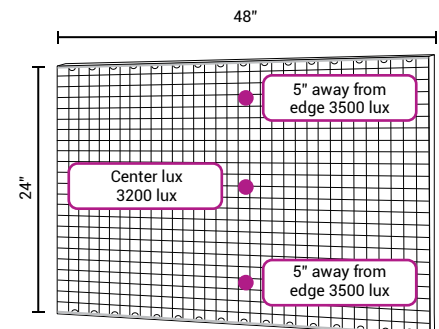
6 mm / 8 mm Panel



12" (304.8 mm) x 12" (304.8 mm) Omnisheet with 5300 K LEDs lit along 2 long edges (8 W)



48" (1219.2 mm) x 96" (2438.4 mm) Omnisheet with 5300 K LEDs lit along 2 long edges (60 W)



24" (609.6 mm) x 48" (1219.2 mm) Omnisheet with 5300 K LEDs lit along 2 long edges (30 W)



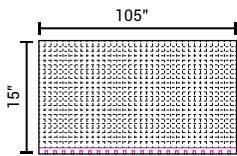
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LED TESTING DATA

LIGHT GUIDED PANEL SPECIFICATIONS BY SIZE

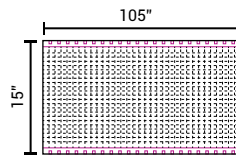
Size (inch)	Size (mm)	LED Strip	*Average Surface Brightness (Lx)	Power Consumption (W)
6 x 6	150 x 150	1 side	6,000	2.0
12 x 12	300 x 300	1 side	3,000	4.0
24 x 24	600 x 600	2 sides	3,200	15.0
36 x 36	900 x 900	2 sides	2,600	23.0
48 x 48	1200 x 1200	2 sides	2,200	30.0
48 x 96	1200 x 2400	2 sides	2,200	60.0
Ø 6	Ø 152	all around	19,000	5.8
Ø 12	Ø 300	all around	13,000	11.2
Ø 24	Ø 600	all around	5,400	24.0
Ø 36	Ø 900	all around	4,500	36.0
Ø 48	Ø 1200	all around	3,500	48.0

OPTIMAL ILLUMINATION OPTIONS FOR UNIFORMITY



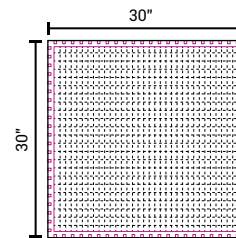
LED ON 1 SIDE

• Maximum width 15"



LED ON 2 SIDES

• Over 15" between LEDs



LED ON 4 SIDES

• Over 30" between LEDs



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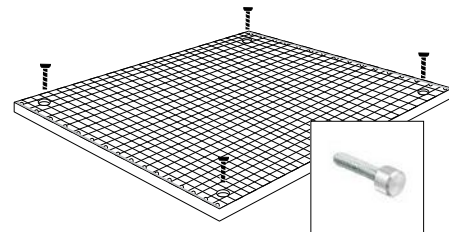
MOUNTING OPTIONS

- ⚠️ **Aluminum heat sink must not be removed from the product**
- Only install in indoor environments**

Mount panels securely using one of these options:

OPTION 1: SCREWS WITH PRE-DRILLED HOLES

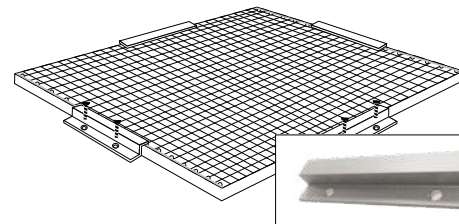
Holes must be drilled by Omnify during the manufacturing process according to specification drawings.



OPTION 1

OPTION 2: Z-CLIPS

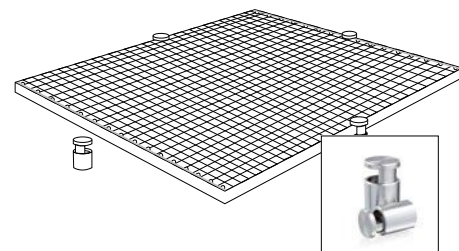
Screw z-clips to the back of the frame and to the wall. Request Z-clips if required.



OPTION 2

OPTION 3: EDGE CLIPS / STANDOFFS

Source either 5/16" (8 mm), or 1/4" (6 mm) clips to suit the depth of your OmniSheet panel. Affix the panel to the surface as you would a mirror. Edge clips are sold separately.



OPTION 3

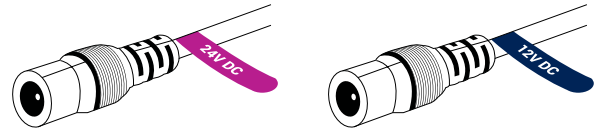
Contact your Omnify representative about alternative mounting options.



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WIRING

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 Light Guided Panel, as within seconds the result may be burned LEDs or fire. Look for our voltage tags at the end of the power cord.

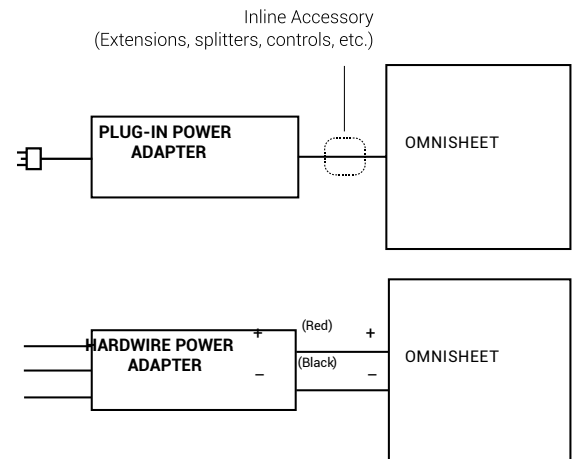


WIRING WITH PLUG-IN POWER ADAPTORS:

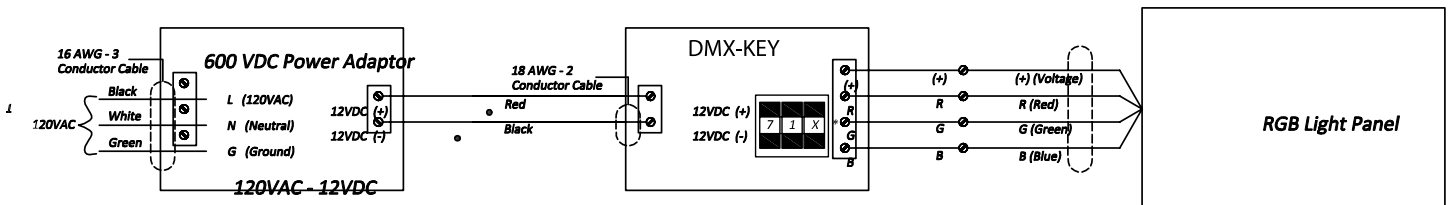
Use a plug-in adaptor to connect the Light Guided Panel to your power source.

WIRING WITH HARDWIRE POWER ADAPTORS:

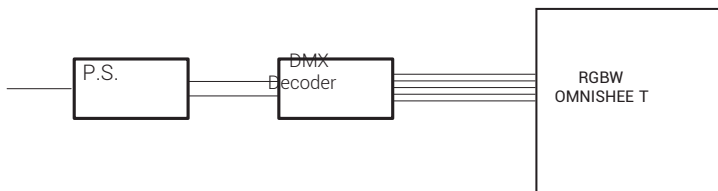
1. Turn off power to your system at the main breaker;
2. Install your system components. Refer to wiring guidelines for each component to build your system;
3. Check connections and turn on power at the main breaker.



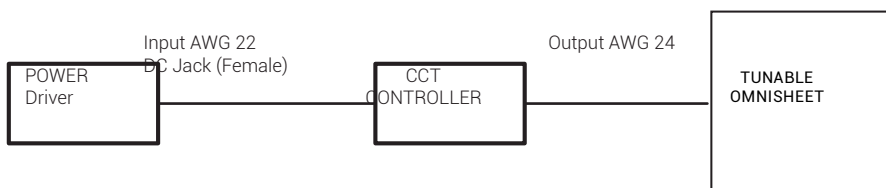
WIRING RGB



WIRING RGBW



WIRING TUNABLE





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WIRE EXIT LOCATION OPTIONS

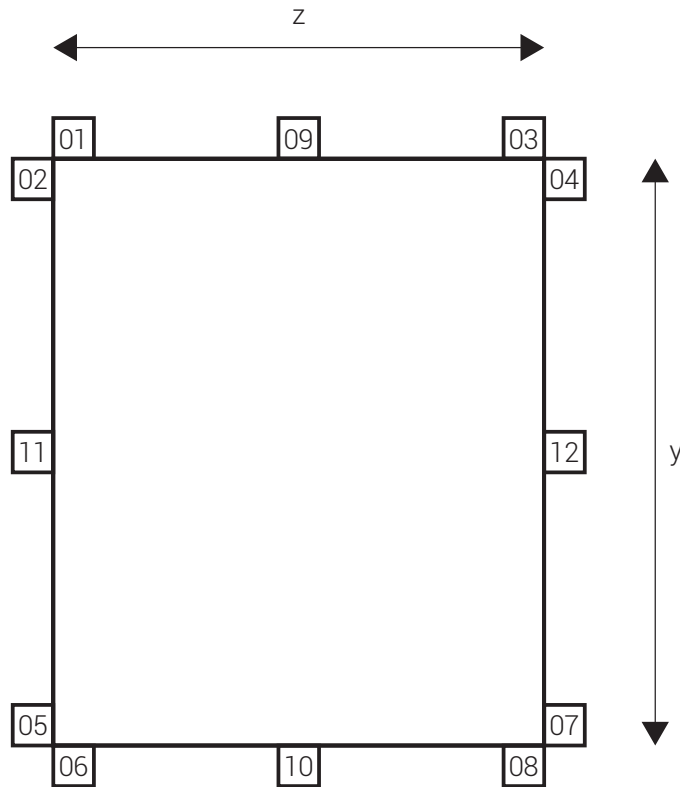
- 1, 3, 6, 8:** Corner Exit short side
- 2, 4, 5, 7:** Corner exit long side
- 9, 10:** Side Exit short side
- 11, 12:** Side exit long side

Chose wire exit(s) from above:

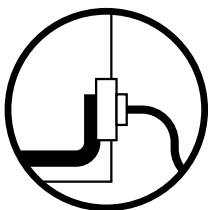
12V - Wattage <50W 1 wire; Wattage >50W 2 wires

24V - Wattage <75W 1 wire; Wattage >75W 2 wires

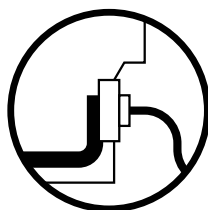
• Please consult with CSR if panel wattage is >100W



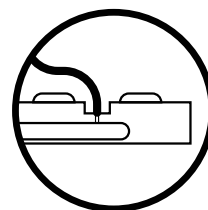
EXIT TYPE OPTIONS



1 - Edge
Power cord exits from edges



2 - Notched
Recessed (notched) power cord exits



3 - Rear
Power cord exits from the rear side of the light panel



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ACCESSORIES AND OPTIONS

POWER ADAPTORS OPTIONS



Plug-in (Class 2)

950003	12V	60W
950021	24V	24W
950024	24V	90W
950035	24V	96W
950036	12V	60W
950036	24V	60W

Hardwire

951005	12V	60W
951009	12V	150W
951012	24V	60W
950037	12V	60W
950037	24V	60W
950038	24V	96W
950039	24V	150W

5 in 1 Dimming Driver

951003-12-060	12V	60W
951004-24-096	24V	96W
951006-24-192	24V	2x96W

Dimmable Driver

950007	12V	60W
951010	12V	150W

LED Power Driver (Class 2)

950003-12-060	12V	60W
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* Other power options available on request

CONTROLLER OPTIONS



Inline Plug and Play Dimmer

970014	12V	48W
970014	24V	96W

Inline Dimmer with Remote

970007	12V	72W
970007	24V	144W

Rotatory Style Dimmer

970002	5V	40W
970002	12V	96W
970002	24V	192W

LED Dimming Module

970001	12V	60W
970001	24V	98W

* Other controller options available on request

CONNECTOR OPTIONS

DC jack 5'

80008	White
80006	Black

2 pin connector cable 5'

980048	White
980049	Black

DC jack 10' (W)

80009	White
80007	Black

Omnify Connector Hub

980047	White
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MOUNTING OPTIONS

Option 1	Pre-Drilled Holes
Option 2	Z-Clips
Option 3	Standoffs



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ORDER INFORMATION

LLP Series

Product #	Size	Color Temperature		Voltage	Wattage
121414 4 mm	z-y: Custom Size	270-2700 K 300-3000 K 350-3500 K 410-4100 K 530-5300 K 650-6500 K	000 Tunable(2700 K - 6500 K)	12-12V DC 24-24V DC	2.4 2.4 W/ft (Low Wattage) 4.4 4.4 W/ft (Standard) 4.9 4.9 W/ft (RGBW) 5.5 5.5 W/ft (Tunable)
121614 6 mm			900 RGB		
121814 8 mm			950 RGBW (3000K)		
121815 RGB 8mm			951 RGBW (4100K)		
121817 RGBW 8mm			100 Static red		
121812 Tunable 8mm			110 Static green 120 Static blue		
Connectors	Illumination	LED Location	Exit Type	Exit Location	Mounting
80008 DC jack 5' White 80006 DC jack 5' Black 80009 DC jack 10' White 80007 DC jack 10' White 980048 2 Pin Connector 5' cable White 980049 2 pin Connector 5' cable Black 980047 Omnify Connector Hub	1: Single face 2: Double face	1: LEDs along 1 long edge 2: LEDs along 2 long edges 3: LEDs along 1 short edge 4: LEDs along 2 short edges 5: LEDs along all 4 edges 6: Custom illumination	1: Edges 2: Notched 3: Rear	Wiring exit options diagram 01 - 02 - 03 - 04 - 05 - 6 07 - 08 - 09 - 10 - 11 - 2	1 Pre-Drilled Holes 2 Z-Clips 3 Standoffs 4 N/A

* Only available with 12V

EXAMPLE

121814-11x14-350-12-2.4-80008-1-1-1-01-2

The specification number immediately above can be deconstructed as follows:

OmniSheet - 8mm; Dimensions(z-y)-11"X 14"; Color temperature-3500K; Voltage-12V; Wattage-2.4W/ft; Illumination-Single; Sided(1); Location(1)-1 Long Edge; Power Cord Exits (1); Power Cord Exit Location from the edges (01)' Z-clips(2).