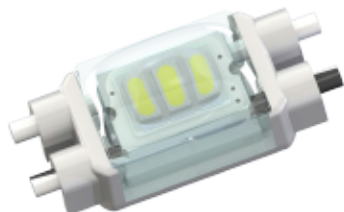


SIGNRAYZ® ULTRA MINI



Global Color Consistency



Advanced Optics



Waterproof Encapsulation



Ordering Information

Part number	White Color Temperature	Module Spacing (mm)	Number of Modules		Nominal Light Output (lm)*		
			per Foot	per Meter	per Module	per Foot	per Meter
LS-UMIN-75K-L4-50A	7500K	50	6.10	20	21	128	420
LS-UMIN-65K-L4-50A	6500K	50	6.10	20	21	128	420
LS-UMIN-57K-L4-50A	5700K	50	6.10	20	21	128	420
LS-UMIN-50K-L4-50A	5000K	50	6.10	20	21	128	420
LS-UMIN-45K-L4-50A	4500K	50	6.10	20	18	110	360
LS-UMIN-41K-L4-50A	4100K	50	6.10	20	18	110	360
LS-UMIN-30K-L4-50A	3000K	50	6.10	20	18	110	360
LS-UMIN-27K-L4-50A	2700K	50	6.10	20	18	110	360

* ±10%

Part number	White Color Temperature	Module Spacing (mm)	Number of Modules		Nominal Light Output (lm)*		
			per Foot	per Meter	per Module	per Foot	per Meter
LS-UMIN-75K-L4-35A	7500K	33.5	9.10	30	21	191	627
LS-UMIN-65K-L4-35A	6500K	33.5	9.10	30	21	191	627
LS-UMIN-57K-L4-35A	5700K	33.5	9.10	30	21	191	627
LS-UMIN-50K-L4-35A	5000K	33.5	9.10	30	21	191	627
LS-UMIN-45K-L4-35A	4500K	33.5	9.10	30	18	164	537
LS-UMIN-41K-L4-35A	4100K	33.5	9.10	30	18	164	537
LS-UMIN-30K-L4-35A	3000K	33.5	9.10	30	18	164	537
LS-UMIN-27K-L4-35A	2700K	33.5	9.10	30	18	164	537

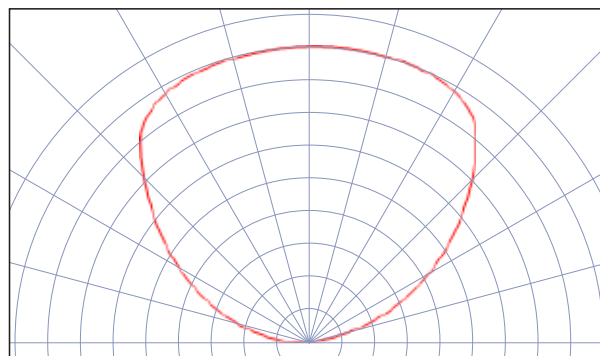
* ±10%

Applications

- Outdoor Miniature Channel Letters
- Outdoor Acrylic Block Letters
- Ultra thin small channel letters

Luminous Intensity Distribution

L4 Beam Pattern

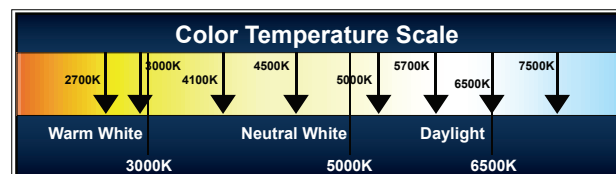


Product Ratings

Luminous Efficacy	88 lm/W
Max. Wattage per Module	0.25 W (0.24 W Nom.)
Input Current	0.020 A/module
Ingress Protection	IP68
Operating Temperature	-40°C to +60°C (-40°F to +140°F)
L70 Lifetime	50,000 hours
Warranty	5 Year limited

Part Number Guide

LED Sign	Module type: ULTRA MINI	Region	Color Temperature	Beam pattern	Spacing in mm	Version Control
LS	-UMIN	-	65K	-L4	-50	A
LS	-UMIN	-	65K	-L4	-35	A



SIGNRAYZ® ULTRA MINI

Power Supply Load Chart

LED Modules	LS-UMIN-xxx-L4-xxA			
Class 2 Power Supply (Wired in Parallel Strings)	Max. # of Modules per string	Total # of Modules	Total # of Feet	Total # of Meters
12W	46	46	7.6	2.3
15W	58	58	9.4	2.9
35W	134	134	22.0	6.7
60W	150	230	37.8	12

Class 1 Power Supply (Wired in Parallel Strings)	Max. # of Modules per string	Total # of Modules	Total # of Feet	Total # of Meters
100W	150	383	62.9	19.2
150W	150	575	94.4	28.8
180W	150	690	113.3	34.5
220W	150	843	138.4	42.2

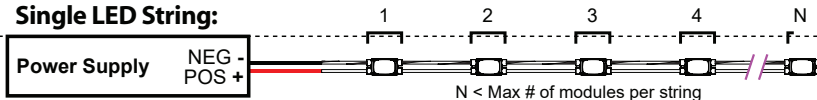
Population Density Guide

Channel depth	Single Row (in / mm)		Single Row (in / mm)		Multiple Rows (in / mm)	
(inch / mm)	Min. Stroke	Module Spacing	Max. Stroke	Module Spacing	Row Spacing	Module Spacing
1.0 / 25	0.31 / 8	1.18 / 30	0.79 / 20	1.18 / 30	0.79 / 20	1.18 / 30
1.6 / 40	0.31 / 8	2.00 / 50	1.60 / 40	2.00 / 50	1.60 / 40	2.00 / 50
2.0 / 50	0.31 / 8	2.00 / 50	3.25 / 82	2.00 / 50	2.50 / 63	2.00 / 50

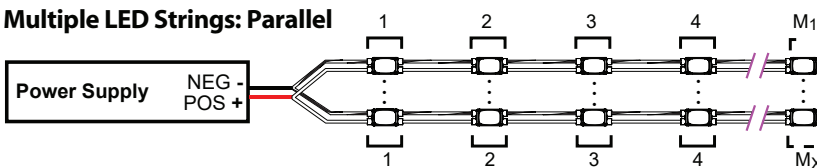
Note: Face material as 7328 3/16" (4.76mm) thick, or WH73 3mm thick

Wiring Diagram

Single LED String:

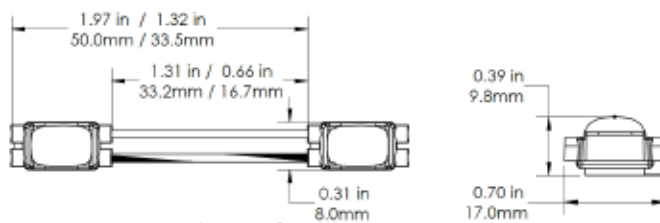


Multiple LED Strings: Parallel



$M_x \leq \text{Max \# of modules per string}$, $M_1 + M_2 + \dots + M_x \leq \text{total \# of modules per power supply}$

LED Module Dimensions



Shipping Information

Module	Quantity per Bag (1 String)	Quantity per Box	Quantity per Case	Case Weight	Box Dimensions			Case Dimensions		
					W	D	H	W	D	H
LS-UMIN-xxx-L4-50A	150 Modules	1200 Modules	6000 Modules	25 (lb)	18.0"	9.0"	4.0"	19.0"	19.0"	10.0"
LS-UMIN-xxx-L4-35A	24.6 16.5 feet	196.9 132 feet	984.3 659.3 feet	11.4 (kg)	457mm	229mm	102mm	483mm	483mm	254mm
	7.5 5.0 m	60 40 m	300 200 m							



1. These products are only suitable for connection to a Class 2 power source rated 12 Volt or less.
2. These products are intended for use only when connected to a power source that complies with Class 2 voltage and energy limited circuit.
3. When these units are connected to a Class 2 circuit, they are not to draw a total wattage of greater than the secondary or output rating of the Class 2 power supply.
4. These products may be secured in place in the end product by any means available.
5. These products are suitable for use in dry, damp, and wet locations. Not suitable for submersed this is the main applications.