



ULTRA MINI — Since its market release in 2016, the IP68 rated ULTRA MINI has become popular in illuminating sleek and modern miniature channel letters. The ULTRA MINI features a range of white and color options, enabling a broader variety of applications for indoor and outdoor signage.



Applications:

- Outdoor miniature channel letters
- Outdoor acrylic block letters
- Ultra thin small channel letters
- Accent lighting



ORDERING GUIDE

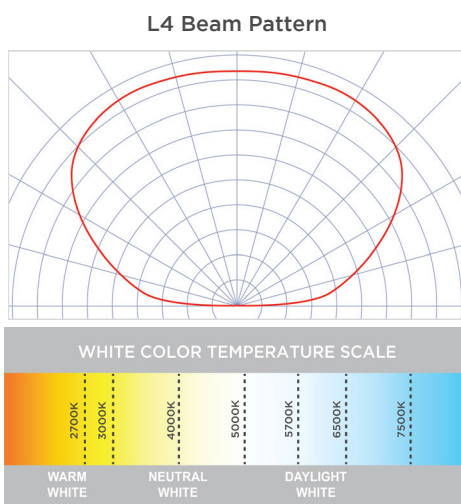
Part Number	Color Temp.	Module Spacing (mm)	Number of Modules		Nominal Light Output (lm)*		
			Per Foot	Per Meter	Per Module	Per Foot	Per Meter
LS-UMIN-75K-L4-50A	7500K	50	6.10	20	21	128	420
LS-UMIN-65K-L4-50A	6500K	50	6.10	20	21	128	420
LS-UMIN-57K-L4-50A	5700K	50	6.10	20	21	128	420
LS-UMIN-50K-L4-50A	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
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



PRODUCT RATINGS

Luminous Efficacy	88 lm/W
Wattage per Module	0.24 W Nominal 0.25 W Maximum
Input Voltage	12 V DC
Input Current	0.020 A/ module
Power Supply Loading	460 modules per 60 W
Ingress Protection	IP68
Operating Temperature	-40° — +140° F (-40° — +60° C)
L70 Lifetime @ 60° C	50,000 Hours
Warranty	5 Year Limited Warranty

LUMINOUS INTENSITY DISTRIBUTION



REV: 17JAN2019
Data sheet subject to change without notice.



SHIPPING INFORMATION

Module Type	Specs	Packaging Quantity			Carton Weight	Box Dimensions			Carton Dimensions			
		Per Bag	Per Box	Per Carton		W	D	H	W	D	H	
LS-UMIN-xxx-L4-50A LS-UMIN-xxx-L4-35A	Modules	150	1200	6000	25 lb 11.4 kg	18.1	8.3	3.3	18.9	18.9	9.3	inch
	Feet	24.6 (16.5)	196.9 (132)	984.3 (659.3)								
	Meters	7.5 (5.0)	60 (40)	300 (200)								
						460	210	85	480	480	235	mm

LAYOUT GUIDE*

Channel Depth (in mm)	Single Row		Single Row		Multiple Rows	
	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

*Module spacing is defined to achieve minimum 600 lux at sign face (7328 white)
**Modules are staggered

POWER SUPPLY LOADING

Module Type	Power Supply (wired in Parallel Strings)	Total # of Modules	LS-UMIN-xxx-L4-50A		LS-UMIN-xxx-L4-35A			
			Max. # of Modules Per String	Total # of Feet	Total # of Meters	Max. # of Modules Per String	Total # of Feet	Total # of Meters
12 W		92	92	15.1	4.6	92	10.1	3.1
15 W		115	115	18.9	5.8	115	12.6	3.9
35 W		268	200	44.0	13.4	245	29.5	9.0
60W		460	200	75.5	23.0	245	50.6	15.4
100W		750	200	123.0	37.5	245	82.4	25.1
150W		1125	200	184.5	56.3	245	123.6	37.7
180W		1350	200	221.5	67.5	245	148.4	45.2
220W		1650	200	270.7	82.5	245	181.3	55.3

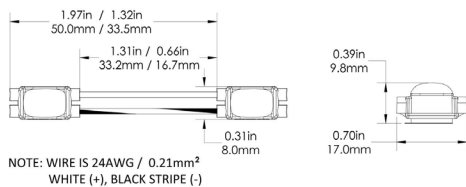
- 12W, 15W, 35W and 60W are UL rated Class 2 Power Output.
- 100W, 150W, 180W, 220W are UL rated Class 1 Power Output.
- The number of modules in each of the parallel strings should not exceed the specified maximum.

LED MODULE TO POWER SUPPLY WIRE SIZE

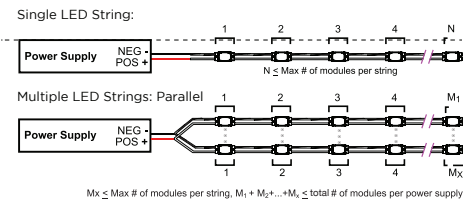
Wire Size		Maximum Distance*	
Gauge (AWG)	Metric (mm ²)	Feet	Meters
26	0.13	3	0.9
24	0.21	4	1.2
22	0.33	7	2.1
20	0.52	11	3.4
18	0.82	18	5.5
16	1.31	29	8.8
14	2.08	45	13.7
12	3.31	71	21.6
10	5.26	120	36.6

*Distance from 60W power supply to 100% load

DIMENSIONS



WIRING DIAGRAM



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