



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-80K-L4-50B	8000K	50	6.10	20	24	146	450
LS-UMIN-65K-L4-50B	6500K	50	6.10	20	22	134	440
LS-UMIN-57K-L4-50B	5700K	50	6.10	20	22	134	440
LS-UMIN-50K-L4-50B	5000K	50	6.10	20	22	134	440
LS-UMIN-40K-L4-50B	4000K	50	6.10	20	22	134	440
LS-UMIN-30K-L4-50B	3000K	50	6.10	20	22	134	440
LS-UMIN-27K-L4-50B	2700K	50	6.10	20	20	122	400
LS-UMIN-80K-L4-35B	8000K	33.5	9.10	30	24	218	720
LS-UMIN-65K-L4-35B	6500K	33.5	9.10	30	22	200	660
LS-UMIN-57K-L4-35B	5700K	33.5	9.10	30	22	200	660
LS-UMIN-50K-L4-35B	5000K	33.5	9.10	30	22	200	660
LS-UMIN-40K-L4-35B	4000K	33.5	9.10	30	22	200	660
LS-UMIN-30K-L4-35B	3000K	33.5	9.10	30	22	200	660
LS-UMIN-27K-L4-35B	2700K	33.5	9.10	30	20	182	600

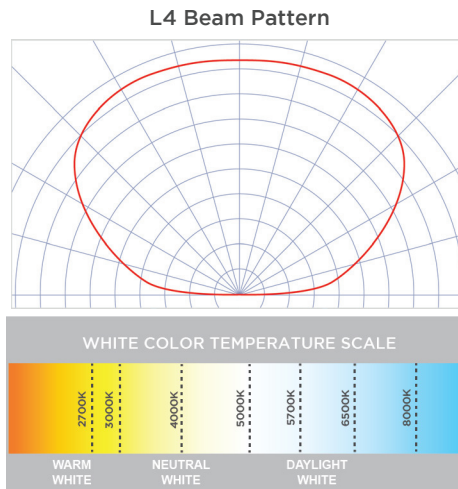
\* ± 10%



**PRODUCT RATINGS**

Luminous Efficacy	108 lm/W
Wattage per Module	0.20 W Nominal 0.22 W Maximum
Input Voltage	12 V DC
Input Current	0.017 A/ module
Power Supply Loading	276 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**





**MODULE DIMENSIONS**

Part Number	Length (in/mm)	Width (in/mm)	Height (in/mm)
LS-UMIN-xxx-L4-50B / LS-UMIN-xxx-L4-35B	0.70/17.0	0.31/8.0	0.39/9.8

**POWER SUPPLY LOADING**

Module Type	LS-UMIN-xxx-L4-50B					LS-UMIN-xxx-L4-35B		
	Power Supply (wired in Parallel Strings)	Total. # of Modules	Max # of Modules Per String	Total # of Feet	Total # of Meters	Max # of Modules Per String	Total # of Feet	Total # of Meters
UL CLASS 2	12 W	55	55	9	2.7	55	6	1.8
	15 W	96	69	15.7	4.8	69	10.6	3.2
	35 W	161	161	26.4	8.0	161	17.7	5.4
	60W	276	172	45.3	13.8	172	30.3	9.2
	180W***	828	172	135.8	41.4	172	91	27.7
UL CLASS 1	100W	450	172	73.8	22.5	172	49.5	15.1
	150W	675	172	110.7	33.7	172	74.2	22.6
	180W	810	172	132.9	40.5	172	89	27.1
	220W	990	172	162.4	49.5	172	108.8	33.2

The number of modules in each of the parallel strings should not exceed the specified maximum.  
\*\*\* 3 - 60 watt channels

**LAYOUT GUIDE\***

**LED MODULE TO POWER SUPPLY WIRE SIZE**

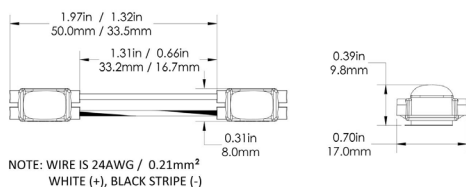
Channel Depth (in   mm)	Single Row		Single Row		Multiple Rows		Wire Size		Maximum Distance*	
	Min. Stroke	Module Spacing	Max. Stroke	Module Spacing	Row Spacing	Module Spacing	Gauge AWG	Metric (mm <sup>2</sup> )	Feet	Meters
1.0   25	0.31   8	1.18   30	0.79   20	1.18   30	0.79   20	1.18   30	20	0.52	11	3.4
1.6   40	0.31   8	2.00   50	1.60   40	2.00   50	1.60   40	2.00   50	18	0.82	18	5.5
2.0   50	0.31   8	2.00   50	3.25   82	2.00   50	2.50   63	2.00   50	16	1.31	29	8.8
							14	2.08	45	12.7
							12	3.31	71	21.6

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

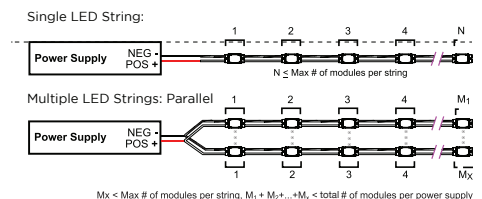
**SHIPPING INFORMATION**

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 (659)								
	Meters	7.5 (5)	60 (40)	300 (200)								

**DIMENSION DRAWING**



**WIRING DIAGRAM**



1. UL ONLY - These products are only suitable for connection to a UL rated Class 2 power source rated 12 Volt or less.
2. 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.
3. 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.
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 applications.