



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**

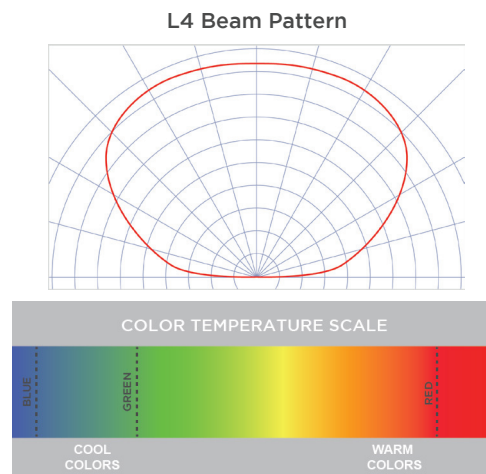
Part Number	Color Temp.	Module Spacing (mm)	Number of Modules		Nominal Light Output (lm)*		
			Per Foot	Per Meter	Per Module	Per Foot	Per Meter
LS-UMIN-TRD-L4-50A	True Red (625 nm)	50	6.10	20	4.4	27	88
LS-UMIN-BLU-L4-50A	Blue (467 nm)	50	6.10	20	2.6	16	52
LS-UMIN-GRN-L4-50A	Green (526 nm)	50	6.10	20	11.6	71	232
LS-UMIN-TRD-L4-35A	True Red (625 nm)	33.5	9.10	30	4.4	40	132
LS-UMIN-BLU-L4-35A	Blue (467 nm)	33.5	9.10	30	2.6	24	78
LS-UMIN-GRN-L4-35A	Green (526 nm)	33.5	9.10	30	11.6	106	348

\* ± 10%

**PRODUCT RATINGS**

Luminous Efficacy	36.9 (TRD), 21.7 (BLU), 96.9 (GRN)
Wattage per Module	0.12 W Nominal 0.13 W Maximum
Input Voltage	12 V DC
Input Current	0.010 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**



**MODULE DIMENSIONS**

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

REV: 07NOV2019  
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	23.3 lb (21.2 lb)	18.1	8.3	3.3	18.9	18.9	9.3	inch
	Feet	24.6 (16.5)	197 (132)	984 (659)	10.6 kg (9.6 kg)	460	210	85	480	480	235	mm
	Meters	7.5 (5.0)	60 (40)	300 (200)								

**LAYOUT GUIDE**

Module Color (Face)	True Red (2793) / Green (7328)		Blue (2051)		True Red (2793) / Green (7328)		Blue (2051)	
	Single Row		Single Row		Multiple Rows		Multiple Rows	
Channel Depth (in.)	Min.   Max. Stroke	Module Spacing	Min.   Max. Stroke	Module Spacing	Row Spacing	Module Spacing	Row Spacing	Module Spacing
1.0	0.31   0.79	1.18	0.31   0.79	0.98	0.79	1.18	0.79	1.18
1.6	0.31   1.60	1.97	0.31   1.60	1.97	1.60	1.97	1.60	1.77
2.0	0.31   3.25	1.97	0.31   3.25	1.97	2.50	1.97	2.50	1.97
<b>(mm)</b>								
25	8   20	30	8   20	25	20	30	20	30
40	8   40	50	8   40	50	40	50	40	45
50	8   82	50	8   82	50	63	50	63	50

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

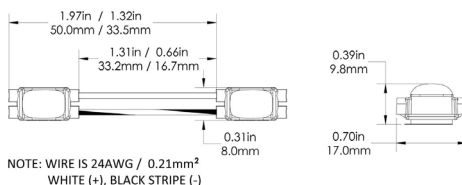
**POWER SUPPLY LOADING**

Module Type	LS-UMIN-xxx-L4-50A				LS-UMIN-xxx-L4-35A				LED Module to power supply wire size			
	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	Wire size		Max Distance	
									Guage AWG	Metric (mm <sup>2</sup> )	Feet	Meters
UL CLASS 2	12 W	92	92	15.1	4.6	92	10.1	3.1	26	0.13	3	0.9
	15 W	115	115	18.9	5.8	115	12.6	3.9	24	0.21	4	1.2
	35 W	268	200	44.0	13.4	245	29.5	9.0	22	0.33	7	2.1
	60W	460	200	75.5	23.0	245	50.6	15.4	20	0.52	11	3.4
	180W**	1350	200	226.5	69	245	157.8	46.2	18	0.82	18	5.5
UL CLASS 1	100W	750	200	123.0	37.5	245	82.4	25.1	16	1.31	29	8.8
	150W	1125	200	184.5	56.3	245	123.6	37.7	14	2.08	45	13.7
	180W	1350	200	221.5	67.5	245	148.4	45.2	12	3.31	71	21.6
	220W	1650	200	270.7	82.5	245	181.3	55.3	10	5.26	120	36.6

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

Distance from 60W power supply to 100% load

**DIMENSION DRAWING**



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.