

With its slim, compact shape, the ULTRA 650 module is designed for brighter and deeper signs. ULTRA 650 features an innovative optic that expands its coverage across the sign, with light output up to 100 lumens per module. With spacing at 8 in. (200 mm), ULTRA 650 modules are rated IP68 and come with a 9-year warranty.

Applications:

- Channel letters
- Box signs
- Cove lighting
- Applications starting at 3 in. (75 mm)



**ORDERING GUIDE**

Part Number	White Color Temp.	Module Spacing (mm)	Number of Modules		Nominal Light Output (lm)*		
			Per Foot	Per Meter	Per Module	Per Foot	Per Meter
LS-U650-71K-B200-A	7100K	200	1.5	5	100	150	500
LS-U650-65K-B200-A	6500K	200	1.5	5	100	150	500
LS-U650-57K-B200-A	5700K	200	1.5	5	100	150	500
LS-U650-50K-B200-A	5000K	200	1.5	5	100	150	500
LS-U650-45K-B200-A	4500K	200	1.5	5	92	138	460
LS-U650-40K-B200-A	4000K	200	1.5	5	92	138	460
LS-U650-30K-B200-A	3000K	200	1.5	5	85	128	425
LS-U650-27K-B200-A	2700K	200	1.5	5	85	128	425

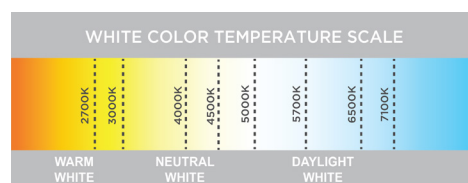
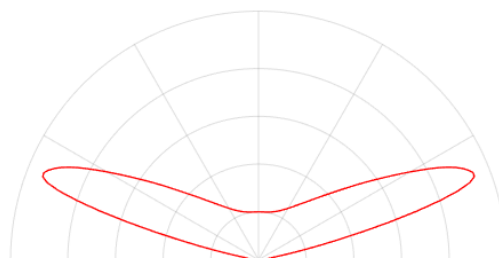
\* ± 10%

**PRODUCT RATINGS**

Luminous Efficacy	128 lm/W @ 6500K
Wattage per Module	0.78 W Nominal 0.82 W Maximum
Input Voltage	12 V DC
Input Current	0.065 A/ module
Power Supply Loading	70 modules per 60 W
Ingress Protection	IP68
Operating Temperature	-40° — +140° F (-40° — +60° C)
L70 Lifetime @ 60° C	50,000 Hours
CRI	90+ CRI
Warranty	9 Year Standard Warranty

**LUMINOUS INTENSITY DISTRIBUTION**

600 Series Batwing Beam Pattern



REV.21MAR2022  
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-U650-xxx-B200-A	Modules	100	500	2000	46.1 lb 20.9 kg	22.1	10.6	4.5	31.0	23.1	9.9	inch
	Feet	66	328	1312		560	270	115	788	588	252	mm
	Meters	20	100	400								

**LAYOUT GUIDE\***

Channel Depth (in.)	Single Row		Multiple Rows		Channel Depth (mm)	Single Row		Multiple Rows	
	Max. Stroke	Module Spacing	Row Spacing	Module Spacing		Max. Stroke	Module Spacing	Row Spacing	Module Spacing
3	10	6.5	6.5	6.5	75	250	165	165	165
4	13	7.87	9	7.87	100	330	200	225	200
5	17	7.87	13	7.87	125	430	200	330	200
6	17	7.87	16	7.87	150	430	200	405	200
7	15	7.87	15	7.87	175	380	200	380	200

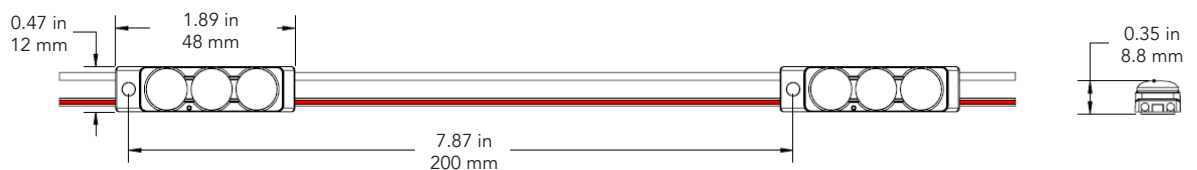
\*Density guide designed to maintain a minimum of 600 lux for a single row or 800 lux for multiple rows at sign face (7328 white).

**POWER SUPPLY LOADING**

LS-U650-xxx-B200-A					
	Power Supply	Max. # of Modules Per Continuous String	Total # of Modules Per Power Supply	Total # of Feet	Total # of Meters
UL CLASS 2	12 W	14	14	9.2	2.8
	15 W	17	17	11.2	3.4
	35 W	40	41	26.9	8.2
	60 W	67	70	45.9	14
	180 W	67	210	137.7	42
UL CLASS 1	100 W	67	115	75.5	23
	150 W	67	173	113.5	34.6
	180 W	67	207	135.8	41.4
	220 W	67	253	166	50.6

Note 1. The number of modules in each of the parallel strings should not exceed the specified maximum.  
2. \*3 - 60 Watt Channels

**DIMENSIONS**



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.