



ADM LED Module – Luna Slim Series

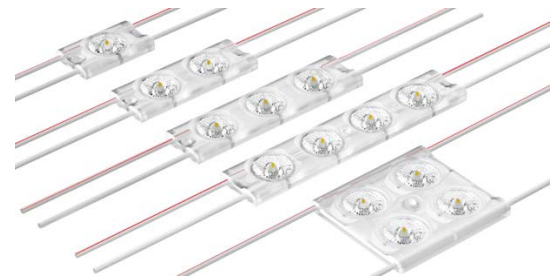
LM-LUNA-S

Feature

- Patent ultra-thin lens and module thin-technology system solution design can achieve 25mm light box and channel letter excellent uniformity requirement.
- High efficiency - 170 lumen/W
- IP66 rated
- Safe dimming, non-burning circuit
- Compact sizes, slim and versatile
- <5% brightness variation across constant current chains

Application

- Best for **25mm to 100mm** depth
- Channel letters (shallow to deep)
- Lightboxes and sign cabinets
- Backlit signage
- Retail, indoor, and outdoor signage



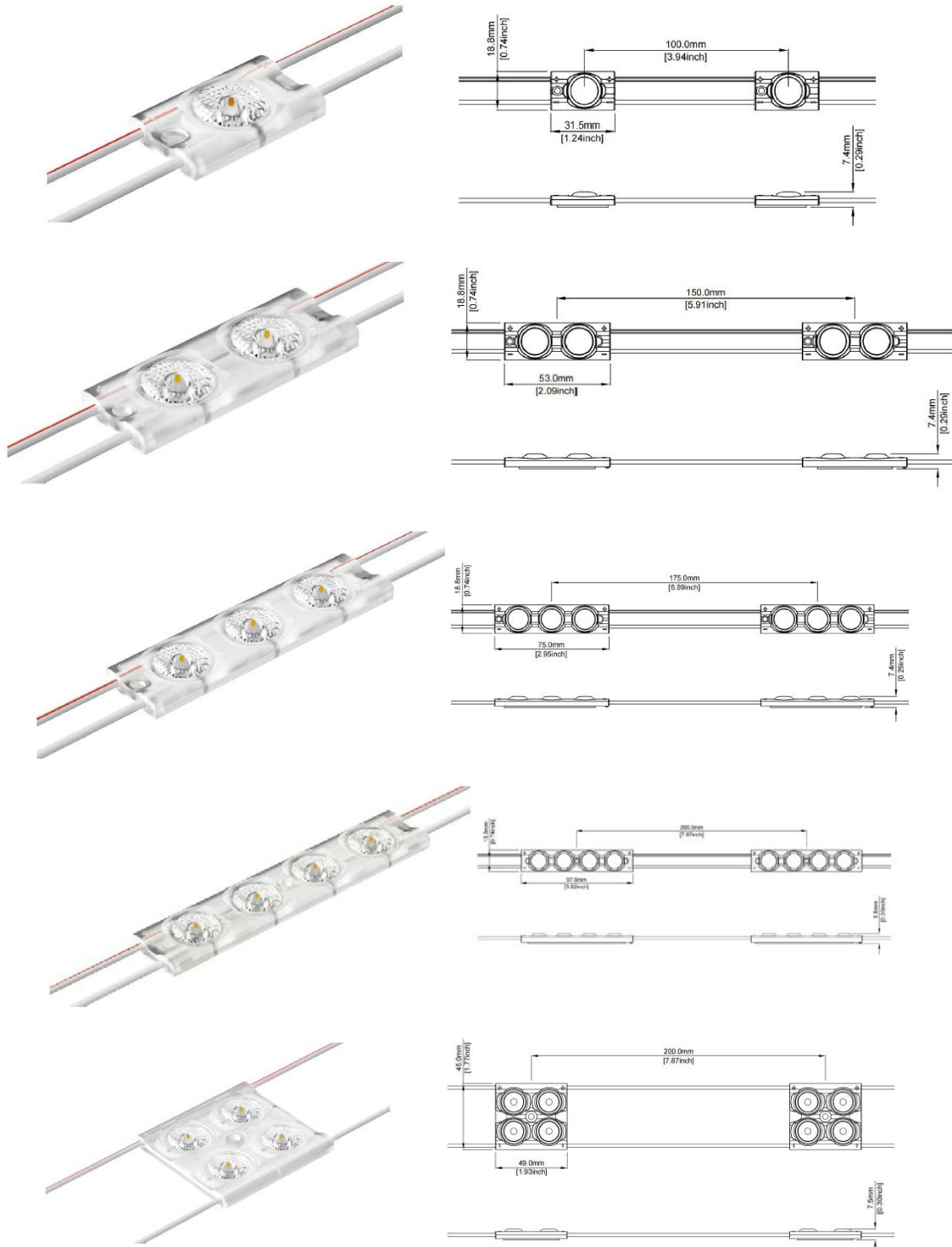
Specification

ADM Part No.	Dimension	Colour*	Voltage	Power**	Brightness**	Max Module Cascade	IP	Beam Angle	Application Depth
LM-LUNA-S1-12V-30K	L31.5 x W18.8 x D7.4mm	3000K (1 LED)	12Vdc	0.36W / Module	61 lm/module	40 modules / chain	IP66	165°	25mm to 100mm
LM-LUNA-S2-12V-30K	L63.0 x W18.8 x D7.4 mm	3000K (2 LEDs)	12Vdc	0.72W / Module	122 lm/module	60 modules / chain	IP66	165°	25mm to 100mm
LM-LUNA-S3-12V-30K	L75.0 x W18.8 x D7.4 mm	3000K (3 LEDs)	12Vdc	1.08W / Module	162 lm/module	40 modules / chain	IP66	165°	25mm to 100mm
LM-LUNA-S4-12V-30K	L97.0 x W18.8 x D8.8 mm	3000K (4 LEDs)	12Vdc	1.44W / Module	245 lm/module	30 modules / chain	IP66	165°	25mm to 100mm
LM-LUNA-S1-12V-65K	L31.5 x W18.8 x D7.4mm	6500K (1 LED)	12Vdc	0.36W / Module	61 lm/module	40 modules / chain	IP66	165°	25mm to 100mm
LM-LUNA-S2-24V-65K	L63.0 x W18.8 x D7.4 mm	6500K (2 LEDs)	24Vdc	0.72W / Module	122 lm/module	60 modules / chain	IP66	165°	25mm to 100mm
LM-LUNA-S3-24V-65K	L75.0 x W18.8 x D7.4 mm	6500K (3 LEDs)	24Vdc	1.08W / Module	162 lm/module	40 modules / chain	IP66	165°	25mm to 100mm
LM-LUNA-S4-24V-65K	L97.0 x W18.8 x D8.8 mm	6500K (4 LEDs - Straight)	24Vdc	1.44W / Module	245 lm/module	30 modules / chain	IP66	165°	25mm to 100mm
LM-LUNA-S4SQ-24V-65K	L49.0 x W45.0 x D7.5 mm	6500K (4 LEDs - Square)	24Vdc	1.44W / Module	245 lm/module	50 modules / chain	IP66	165°	25mm to 100mm

*Special Order available in 4000K, 5000K, 6000K

** Standard tolerance of ±10% apply to Power and Brightness

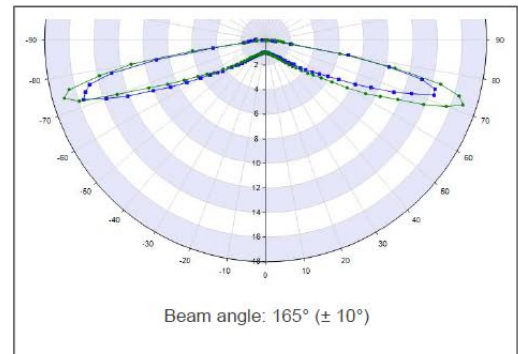
Product Dimension



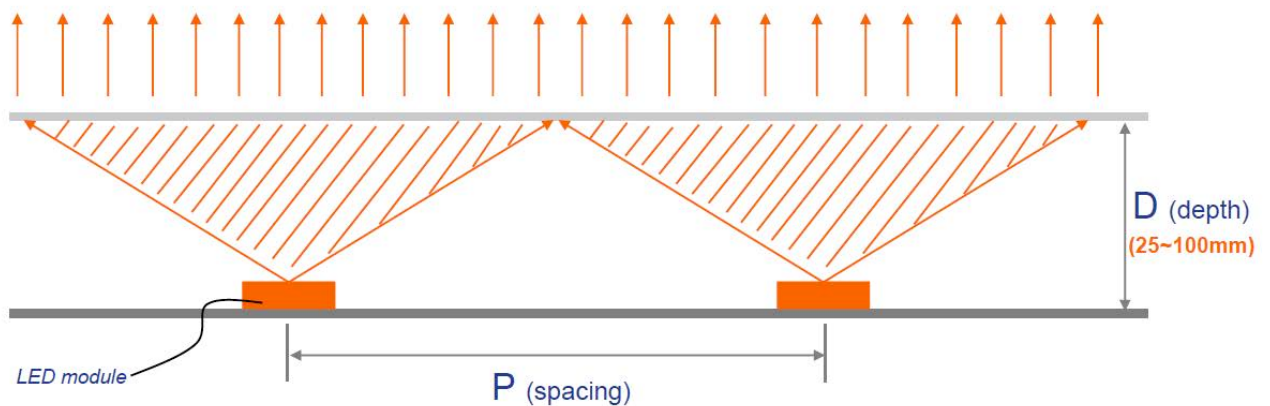
Spectroscopic Data

Operating Environment (t_a)	-25°C to +60°C
Storage Temperature Range (t_s)	-40°C to +85°C
IP Rating	IP66
Lifetime Warranty (L70B50)	5 years
t_c temperature	75°C
Energy Efficacy Class (170 LPW) 	D (η_{TM} =157lm/W)
Energy Efficacy Class (150 LPW) 	D (η_{TM} =139lm/W)
Energy Efficacy Class (100 LPW) 	F (η_{TM} =93lm/W)
Dimming mode	PWM dimmable
Cutting Solution	Cut on wire between every module
Certification	UL, CE, BIS
Safety Requirements	IEC/EN 62031, IEC/EN 60598-1, IEC/EN 61347-1

Distribution Graph



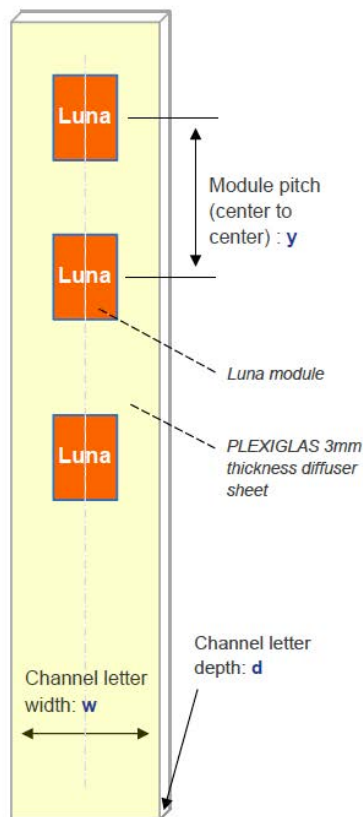
Coverage



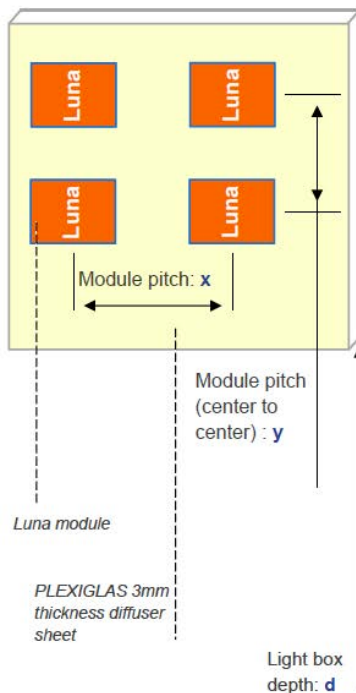
$$\text{optical performance proportion} = \frac{D(\text{depth})}{P(\text{spacing})} = 1:2.5$$

- The proportion of "P" and "D" can show the performance of lens optics design.
- The bigger proportion, the wider light spot.
- The proportion is for reference from lab, actual layout need based on real application.

Layout Suggestion

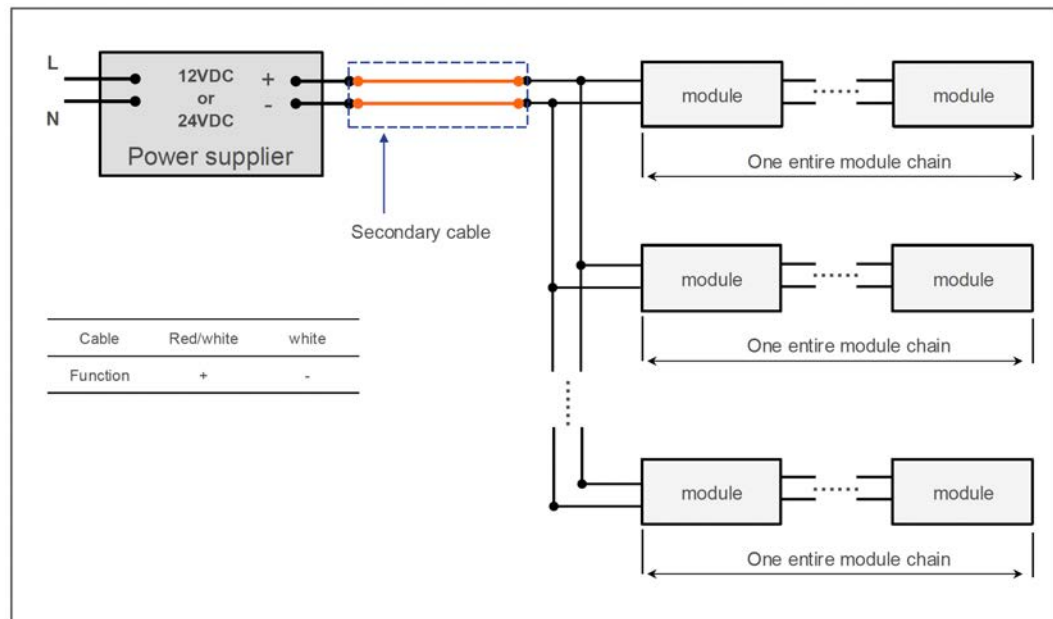


Product	Channel letter and installation dimension (mm)			Illuminance: PLEXIGLAS WH02 (light transmission rate 44%, low light scattering)			Illuminance: PLEXIGLAS WH73 (light transmission rate 23%, high light scattering)		
model	d	w	y	lx	nit	unifor mity	lx	nit	unifor mity
Luna -1	25	50	60	9337	2521	94%	7283	1966	94%
	30	70	60	7371	1990	94%	5750	1552	94%
	40	100	75	4606	1244	94%	3592	970	94%
	50	150	100	2324	627	93%	1806	488	94%
Luna -2	30	70	75	11366	3069	95%	8866	2394	94%
	40	100	100	7144	1929	95%	5572	1504	94%
	50	150	100	4686	1265	94%	3642	983	94%
	60	150	150	3071	829	96%	2395	647	95%
Luna -3	40	100	125	8549	2308	96%	6668	1800	95%
	50	150	150	4907	1325	96%	3814	1030	95%
	60	150	175	3938	1063	97%	3071	829	96%
	70	150	175	3623	978	97%	2826	763	96%
Luna -4	40	100	150	9961	2689	95%	7769	2098	95%
	50	150	150	6533	1764	94%	5078	1371	95%
	60	150	175	5243	1416	95%	4090	1104	95%
	70	150	200	4020	1085	95%	3135	847	95%



Product	Light box and installation (mm)			Illuminance: PLEXIGLAS WH02 (light transmission rate 44%, low light scattering)			Illuminance: PLEXIGLAS WH73 (light transmission rate 23%, high light scattering)		
model	d	x	y	lx	nit	unifor mity	lx	nit	unifor mity
Luna -1	25	50	50	13904	3754	87%	10152	2741	87%
	30	75	75	7068	1908	87%	5188	1401	86%
	40	100	75	4799	1296	86%	3598	971	87%
	50	100	75	3612	975	87%	2699	729	87%
Luna -2	30	100	75	10963	2960	88%	8048	2173	87%
	40	100	75	9677	2613	87%	7254	1959	88%
	50	125	110	4034	1089	88%	3014	814	88%
	60	150	110	3169	856	89%	2399	648	89%
Luna -3	40	125	100	8908	2405	89%	6678	1803	90%
	50	150	115	5280	1426	89%	3945	1065	89%
	60	175	135	3160	853	91%	2392	646	91%
	70	175	135	2942	794	91%	2059	556	92%
Luna -4	40	125	100	11861	3203	88%	8892	2401	89%
	50	150	125	6249	1687	88%	4670	1261	88%
	60	175	150	4208	1136	90%	3186	860	90%
	70	200	150	3264	881	90%	2285	617	91%

Wiring Diagram



Additional Information

1. Installation of LED modules and power supplies must comply with all applicable regulations and standards.
2. Only qualified electricians are permitted to perform the installation.
3. LED modules must be connected in parallel for safe electrical operation. Serial connections are not recommended, as unbalanced voltage drops may lead to hazardous overloading.
4. Electrical connection should be made using the contact cables or terminals provided on the module. Refer to the technical specifications for the maximum number of modules that can be operated with a single power supply.
5. To prevent mechanical damage, LED modules must be securely mounted to the intended surface. Avoid exposure to heavy vibration.
6. LED modules are dimmable via PWM (pulse width modulation).

Document Revision

Revision	Description	Date	Author
1.0	Initial release	12 August 2025	Michael Xu