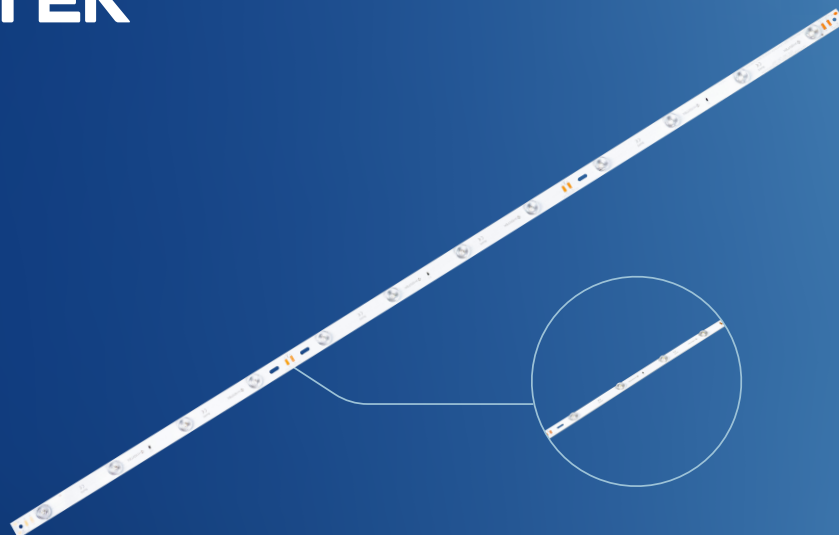




A 208lm/w
dedicated light box lamp strip module (24V)

HUB-930SA-024012

LED Module Datasheet

HIGNTEK HUB-930SA-024012 product is lighting optimized strip module specifically designed for light box. The products are divided into 12V and 24V, and the use of high light efficiency UHE-3030 led chip makes the module have ultra-high efficiency and brightness, and is matched with an optical lens uniform luminous Angle. With this common building lock approach, it simplifies system integration and accelerates time to market.

FEATURES AND BENEFITS

Efficacy and luminous flux of up to 208lm/W typical and 1248lm available

Available CCT/CRI options: 2700K-6500K(70 & 80 CRI)

Designed to be compatible with standard third party optics

MCPCB for efficient heat dissipation and mechanical robustness

CE, ROHS, ERP compliance

5-year limited guarantee

PRIMARY APPLICATIONS

Light box

Soft membrane smallpox



Performance Characteristics

Product Selection Guide

Table 1. Product performance of HIGNTEK HUB-930SA-024012 (IF=250mA, T_p=25°C)

NOMINAL CCT	CRI [RA]	CURRENT [mA]	FORWARD VOLTAGE [V]	POWER [W]	LUMINOUS FLUX [lm]		EFFICACY [lm/W]	
					T _c = 25° C	T _c = 45° C	T _c = 25° C	T _c = 45° C
2700K	70	250	24	6	1148	1125	191	188
3000K	70	250	24	6	1161	1138	194	190
3500K	70	250	24	6	1161	1138	194	190
4000K	70	250	24	6	1248	1223	208	204
5000K	70	250	24	6	1248	1223	208	204
5700K	70	250	24	6	1248	1223	208	204
6500K	70	250	24	6	1236	1211	206	202
2700K	80	250	24	6	1074	1053	179	176
3000K	80	250	24	6	1085	1063	181	177
3500K	80	250	24	6	1085	1063	181	177
4000K	80	250	24	6	1167	1144	195	191
5000K	80	250	24	6	1167	1144	195	191
5700K	80	250	24	6	1167	1144	195	191
6500K	80	250	24	6	1155	1132	193	189

Notes for Table1:

1. T_c: temperature at which performance is specified measured at "T_c point".
2. HIGNTEK maintains a measurement tolerance of : Luminous flux: ±7 %, CRI: ±3.0.
3. Measurement tolerance of CCT is ±5%.
4. HUB-930SA-024012 Color temperature (2700K-6500K) is optional.

Product Code Information

Table 2. Product Code-HUB-930SA-024012-XXX

CRI [RA]	NOMINAL CCT	PRODUCT CODE
70	2700K	HUB-930SA-024012-277
	3000K	HUB-930SA-024012-307
	3500K	HUB-930SA-024012-357
	4000K	HUB-930SA-024012-407
	5000K	HUB-930SA-024012-507
	5700K	HUB-930SA-024012-577
	6500K	HUB-930SA-024012-657
80	2700K	HUB-930SA-024012-278
	3000K	HUB-930SA-024012-308
	3500K	HUB-930SA-024012-358
	4000K	HUB-930SA-024012-408
	5000K	HUB-930SA-024012-508
	5700K	HUB-930SA-024012-578
	6500K	HUB-930SA-024012-658

Electrical Characteristics

Table 3. Electrical characteristics for HIGNTEK HUB-930SA-024012

PARAMETER	SYMBOL	VALUE			UNIT	REMARK
		MIN.	TYP.	MAX.		
Operating Current	I_F	-	250	-	mA	-
Operating Voltage	V_F	-	24.0	-	Vdc	$I_F = 250 \text{ mA}$
Power Consumption	P	-	6.0	-	W	$T_P = 25 \text{ }^\circ\text{C}$

Notes for Table3:

1. T_c : temperature at which performance is specified measured at "Tc point".
2. HIGNTEK maintains a tolerance of $\pm 0.1\text{V}$ on forward voltage measurements.

Absolute Maximum Ratings

Table 4. Maximum Operating Specification ($T_p=25^{\circ}\text{C}$)

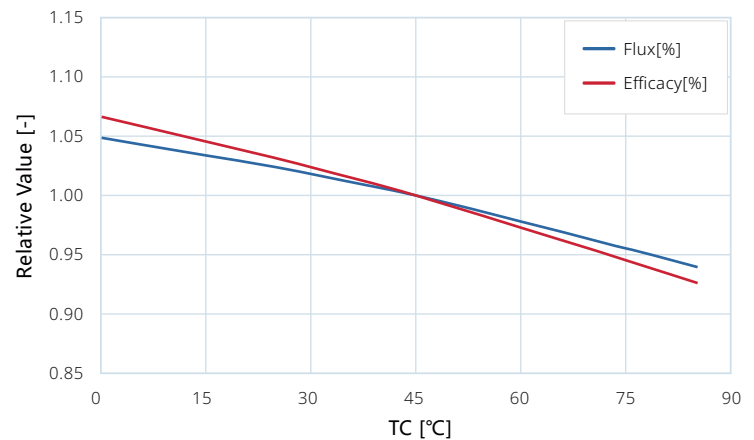
PART NUMBER	PARAMETER	SYMBOL	UNIT	RATING
HUB-930SA-024012-XXX	Power Consumption	P	W	12
	DC Forward Current	I_F	mA	400
	Operating Temperature	-	$^{\circ}\text{C}$	-40 to 65
	Storage Temperature	T_{Ctg}	$^{\circ}\text{C}$	-40 to 105
	ESD Sensitivity	-	KV	3
	Beam Angle	$\angle$	$^{\circ}$	170
	IP Grade	-	-	IP20
	Maximum Reverse Voltage	V_{RRM}	V	Module are not designed to be driven in reverse bias

Notes for Table4:

1. T_p : temperature at which performance is specified measured at " T_c point".

Temperature Characteristics (DC24V)

$T_c [^{\circ}\text{C}]$	Flux [%]	Efficacy [%]
85	94	93
65	97	96
45	100	100
25	102	103
0	105	107

Figure 1. Typical normalized Flux and Efficacy vs. T_c temperature for HIGNTEK HUB-930SA-024012 at DC24V.

Mechanical Dimensions

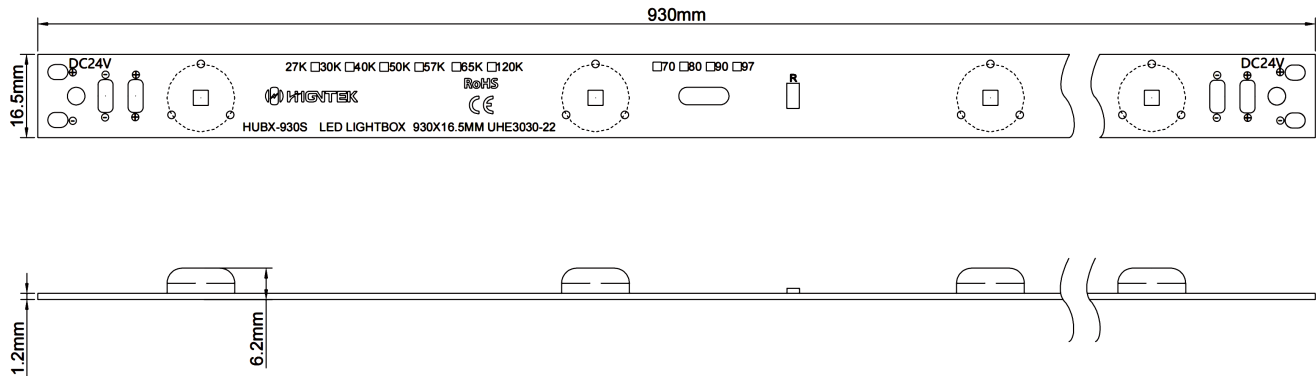


Figure 2. Mechanical Dimensions for HIGNTEK HUB-930SA-024012.

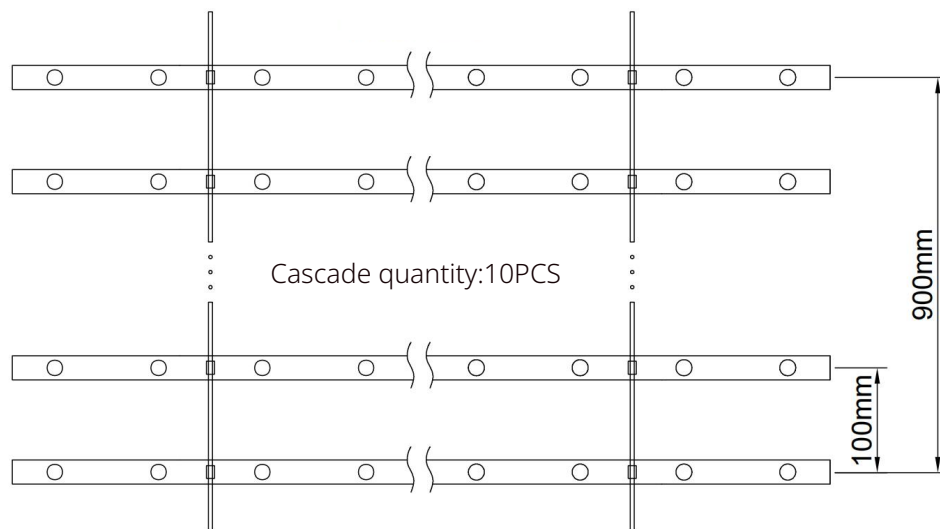


Figure 3. Assembly drawing for HIGNTEK HUB-930SA-024012.

Notes for Figure 3:

1. Drawings are not to scale.
2. All dimensions are in millimeters.

Table 5. Bill of Materials for HIGNTEK HUB-930SA-024012.

COMPONENT	SPECIFICATION PARAMETERS	QUANTITY
LED:3030	UHE-3030 6V	12
PCB: MCPCB	-	1
SMD Resistance	R:24.3Ω	3
Diffuse lens	-	12

Notes for Table5:

1. Resistance specifications are adjusted according to different power.

Optional Branding (LED)



About HengXinYuan

Hengxinyuan is a professional lighting solutions company that helps customers deliver differentiated solutions to gain and maintain a competitive edge. The company's broad product portfolio includes a wide array of package and device choices such as CREE led, SAMSUNG led, LUMILEDS led, UHE led, Indoor lighting module and Outdoor lighting module. Hengxinyuan's LED products pursue high efficiency, high quality, and high reliability, and aim to meet the needs of customers to the greatest extent. With the supply of high-standard supply chain services as the driving force, they contribute to the development of global LED green and healthy lighting power.