

Technical data

CODE: 551313/556313/554313/552313/553313/558313

PRODUCT: LED MODULE DX3-3

NOTE: TECHNICAL DATA

IMAGE:



LAST UPDATE:

9/2021



CATEGORY

LED TECHNOLOGY

DENCOP
LIGHT & BUILDING

LED MODULE DX3-3

CE	RoHS	2835 SMD	3 LEDs	Injection Lens	DC 12V	IP 65	3 years
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Model D165-3

3 pcs 2835 SMD LEDs, 70 x 16 x 6 mm, white shell, equipped with optical devices, injection series, 12 V DC, constant current, LED module

Features:

- Unique hard-edged shape, high-end and elegant
- 2835 SMD LED with low attenuation and long life
- Standard cascading qty up to 50 pcs
- Beam angle 160°
- Can be cut between every unit
- CE, RoHS compliant

Applications

Optimal for 8 - 12 cm depth channel letter

Warranty

5 years or 22 000 hours, whichever comes first

Model	551313	556313	552313	558313	553313	554313
LED color	Pure white	Pure white	Red	Green	Blue	Yellow
CCT (K) / WL (nm)	7000 K	4000 K	620 - 625 nm	525 - 530 nm	465 - 470 nm	585 - 590 nm
CRI	≥ 75	≥ 75	-	-	-	-
SDCM	-	-	-	-	-	-
Beam angle	160°	160°	160°	160°	160°	160°
Luminous flux	92 lm	87 lm	27 lm	53 lm	10 lm	23 lm
Luminous efficacy	128 lm/W	120 lm/W	38 lm/W	74 lm/W	14 lm/W	32 lm/W
Working voltage	12 VDC					
Working current	60 mA					
Power	0,72 W/pcs					
IP grade	IP65	IP65	IP65	IP65	IP65	IP65
Operating temperature °C	-25 ~ +60°C					
Operating temperature °F	-13 ~ +140°F					
Storage temperature °C	-25 ~ +70°C					
Storage temperature °F	-13 ~ +158°F					
Standard cascading qty	50 pcs					
Single-ended max. cascading qty	25 pcs					
Double-ended max. cascading qty	50 pcs					
Weight (g/piece)	9,93 g/pcs					
Weight (lb/piece)	0,022 lb/pcs					

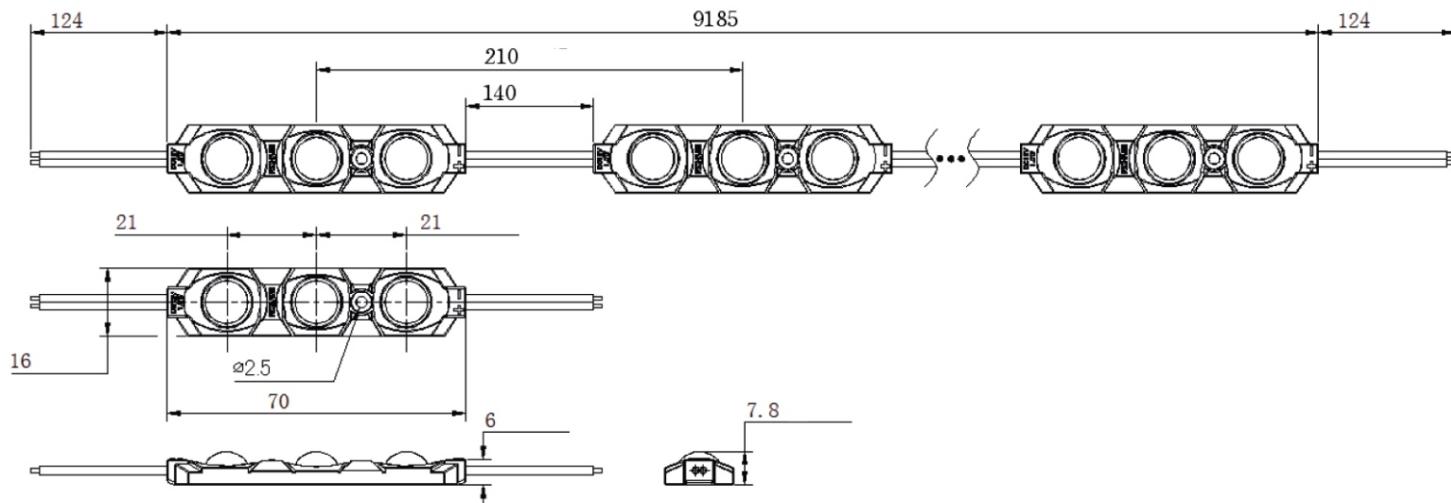
Notes:

(1) Testing environment temperature: 25±2°C (77±3,6°F)

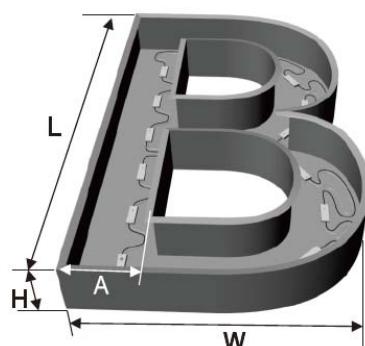
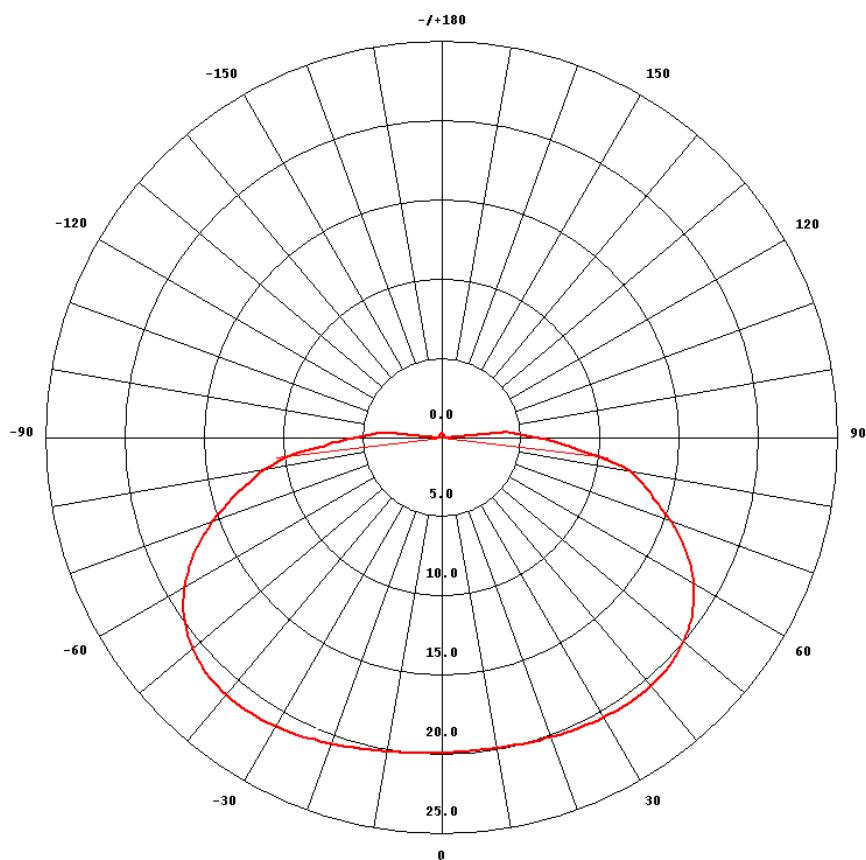
(2) The actual data of each single product may differ from above typical data which are subject to change without prior notice

(3) The above „--“ means the parameters are not required temporarily

Profile drawings



Light distribution



Layout data

Channel letter				LED Module			Surface illuminance range (lux)
Main width A (mm)	Main thickness H (mm)	Size L*W (mm)	Area (m ²)	Max. arrangement spacing (mm)	Total qty (pcs)	Installing density (pcs/m ²)	
85	80	650 x 320	0,14	100	14	99	4 700 - 5 600
115	100	850 x 425	0,25	135	15	59	3 400 - 4 000
140	120	1040 x 505	0,37	185	14	38	2 300 - 2 700

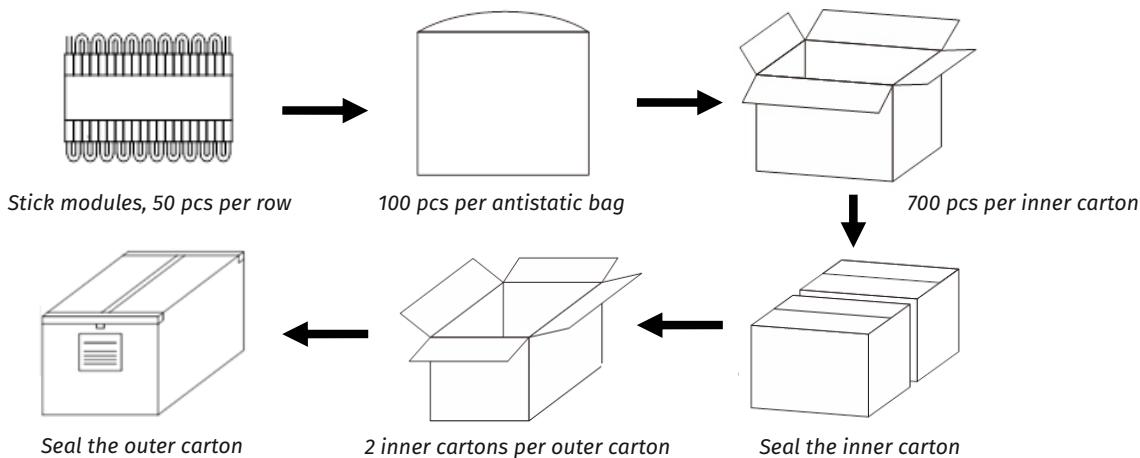
Notes

- (1) The above data is tested from the modules with color temperature of 9 000 K
- (2) The above light box uses acrylic white board with 3 mm depth and 54,4% light transmittance
- (3) The above illuminance is the minimum value tested on the even surface
- (4) The above data is for reference only

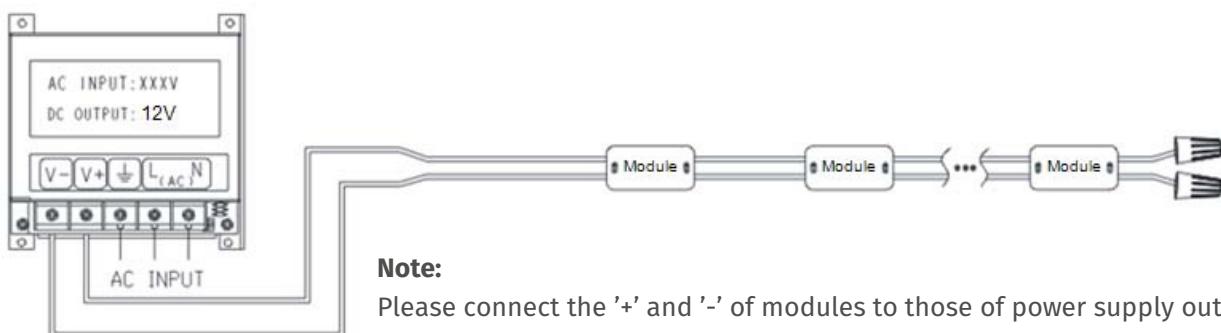
Packaging information

P/N	Qty (pcs/ bag)	Qty (bag/ carton)	Total qty (pcs)	Total weight	Length	Outer carton					
				kg	lb	Width					
				mm	inch	inch					
DX3-3	100	14	1 400	15,92	35,1	528	20,78	376	14,8	272	10,7

Packaging diagram



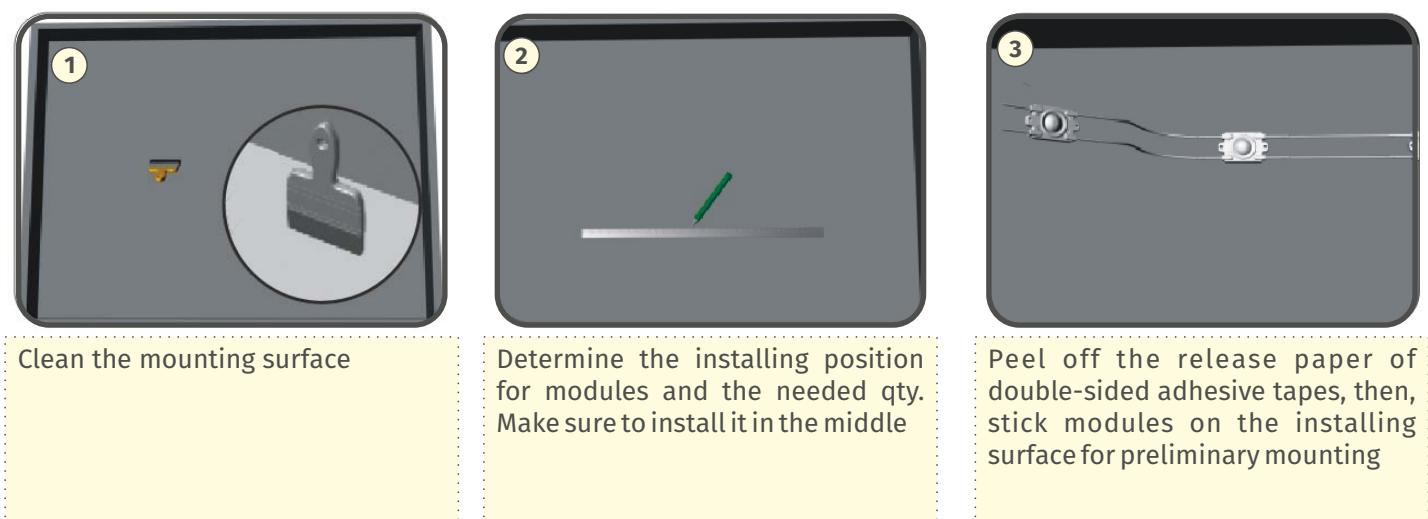
Connection instruction

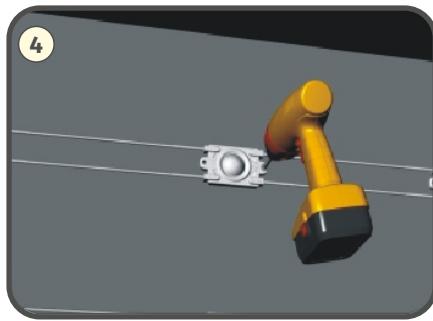


Note:

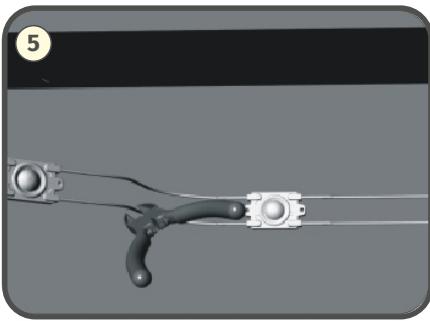
Please connect the '+' and '-' of modules to those of power supply output correctly.

Instalation steps



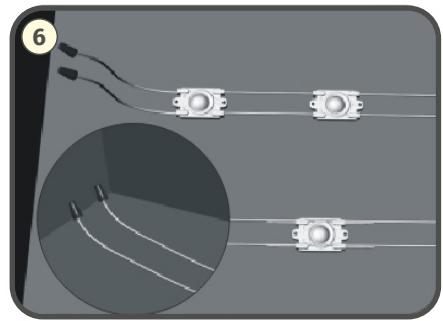


4
Adjust the modules to the best position, press the double-sided tape tightly and then fix by screws

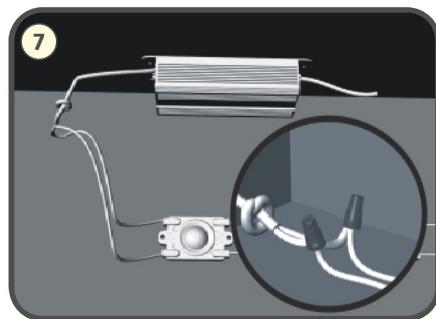


5
Cut off the modules to the desired qty, and peel off the insulation skin of wires about 10 mm

Note: Please cut from the middle of wires between modules



6
When the wires exposed in the last module, please peel off the insulation skin of wires about 10 mm each, then, screw in terminals respectively, and dispose with waterproof, insulation protection



7
Please ensure that the '+' and '-' of the wires of modules are connected with those of power supply correctly, and dispose with waterproof, insulation, anti-circuit and anti-corrosion protection.

Troubleshooting

MALFUNCTIONS	POSSIBLE CAUSES	SOLUTIONS
All LEDs don't work	<ul style="list-style-type: none"> ► 1. The power supply did not connect to power grid ► 2. The electricity due to short-circuit of external power supply ► 3. The wires of module connect to power supply output reversely 	<ul style="list-style-type: none"> ► Power on ► Remove the malfunction caused by short-circuit, power on again ► Check the connecting and ensure the wires are connected correctly
Part of LEDs don't work	<ul style="list-style-type: none"> ► 1. Part of power supplies do not have output ► 2. Part of module wires have malfunction ► 3. Particular module connected reversely 	<ul style="list-style-type: none"> ► Check the power supply system ► ► Correct connection
Brightness of LEDs is weak or uneven	<ul style="list-style-type: none"> ► 1. Overloaded power supply ► 2. The power loss of power circuit is huge or the power loss of each circuit existing big difference ► 3. Exceed in qty of modules in series 	<ul style="list-style-type: none"> ► Replace it with higher power supply ► Ensure working voltage of is within $\pm 5\%$ of rated voltage <ul style="list-style-type: none"> 1. Shorten the length of wires between the first module and power supply or replaced with wires with bigger diameter; 2. Ensure the cascading qty of string is less than or equal to the allowed maximum cascading qty, and each module cascading qty is well-balanced ► Lessen the cascading qty for module and ensure the qty for each electrical circuit is within the maximum cascading qty.
Brightness of LEDs is weak or uneven	<ul style="list-style-type: none"> ► 1. Poor contacted in the joints ► 2. Failures in power supply 	<ul style="list-style-type: none"> ► Find out and tackle malfunction immediately ► Replace power supply

Declaration

- If the external flexible cable of light box is damaged, please replace it by its manufacturer or its service agent or qualified person to avoid a hazard.
- The specific installation and cautions please refer to the user manual.
- The given data in this specification is based on our standard product. There may be existed slight difference compared with actual products.
- All Illustrations in this specification are for reference only.
- This product is subject to change or modify without prior notice.
- DENCOP reserves the right of final explanation for this specification.