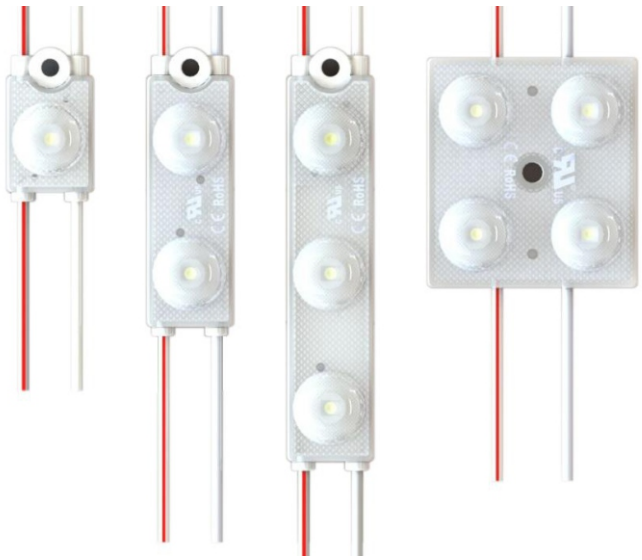
obchod@dencop.cz | +420 571 894 000
export@dencop.cz | +420 571 894 001

Technical data

CODE:	541321 / 541322 / 541323 / 541324
PRODUCT:	LED MODULE D170
NOTE:	TECHNICAL DATA
IMAGE:	
LAST UPDATE:	5/2025

LED MODULE D170

CE | RoHS | IP 67 | 1-4 LEDs | DC 24V | 5 years

Model D170

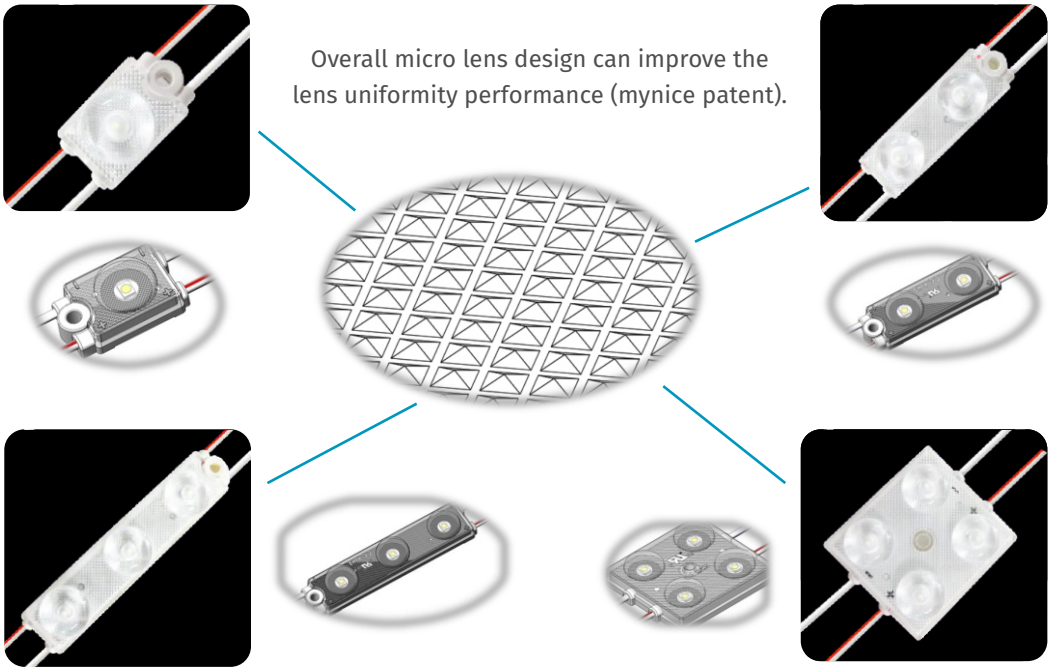
Areas of application

- Signage and illuminated advertising
- Backlighting of channel letters and light box
- Best for 50 mm to 200 mm depth (1.2inch to 8inch)

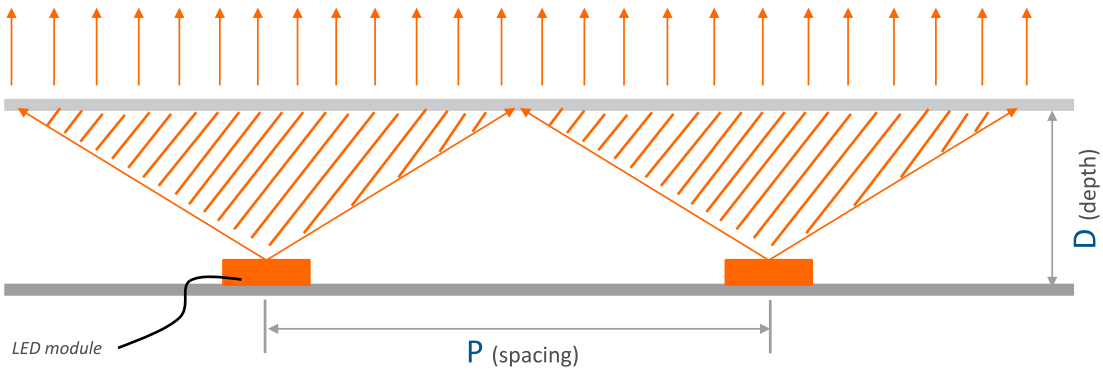
Product main benefits:

- Uniformand efficient illumination at high LED module distance thanks to new excellent lens design
- New technology to get high efficiency
- 5 years warranty
- 170 lm/W (6500K, D170-2/D170-4), 150 lm/W (6500K, D170-1/D170-3)

Lens technology (micro lens design)



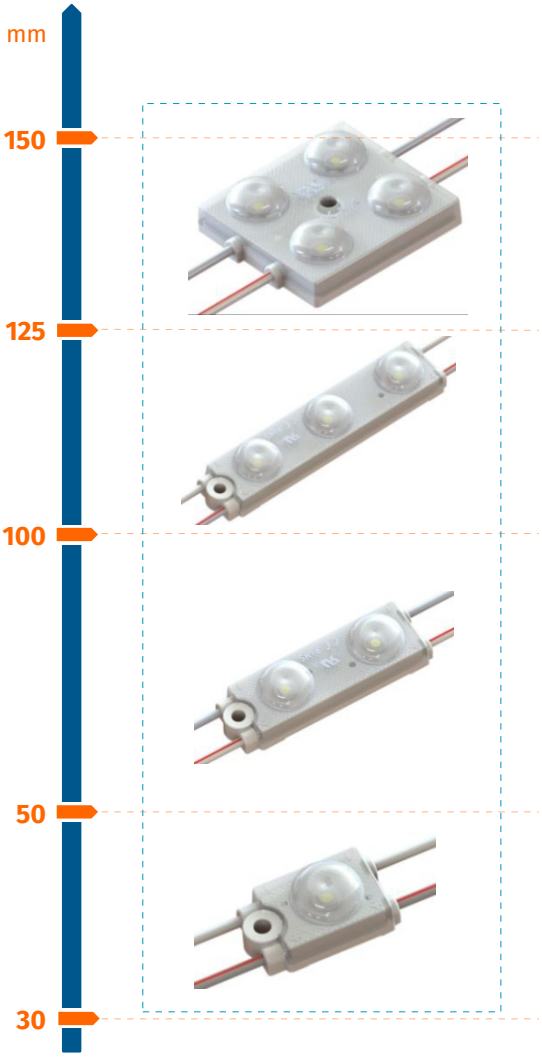
Optics technology (wide light spot)

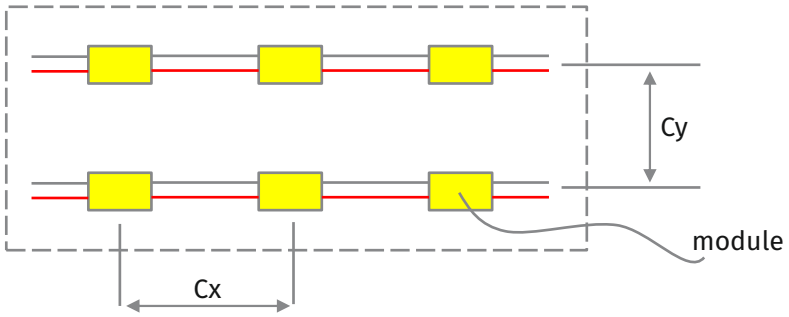


$$\textit{optical performance proportion} = \frac{D\ (depth)}{P\ (spacing)} = 1{:}3$$

- 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

Application





Product	Depth	Cx	Cy	Surface illuminance
D170-1	50 mm	100 mm	90 mm	2100 lux
D170-2	80 mm	180 mm	160 mm	1380 lux
D170-3	100 mm	220 mm	200 mm	1200 lux
D170-4	130 mm	260 mm	240 mm	1150 lux

Electrical data (constant current)

Product	Typical Voltage	Energy Consumption (W/module)	Energy Consumption (W/chain)	Energy Consumption (W/ft.)	Additional Information (modules/chain)
D170-1	24 VDC	0,36	36	1,08	90
D170-2	24 VDC	0,72	43,2	1,2	70
D170-3	24 VDC	1,08	64,8	1,512	50
D170-4	24 VDC	1,44	43,2	1,8	30

Remark

1. Ranking at t_a = 25°C
2. Constant current design

Photometrical data (150lm/W)

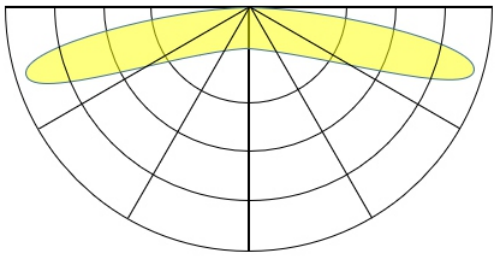
Product	Light color (designation)	Color (CCT, wavelength)	Typical Brightness (lumen/module)	Typical Brightness (lumen/ft.)
D170-1	Warm white	3000 K / 4000 K	51	154
	White	5000 K / 6500 K / 7100 K	54	162
	Cool White	8000 K / 10 000 K	51	154
D170-3	Warm white	3000 K / 4000 K	154	212
	White	5000 K / 6500 K / 7100 K	162	225
	Cool White	8000 K / 10 000 K	154	212

Photometrical data (170lm/W)

Product	Light color (designation)	Color (CCT, wavelength)	Typical Brightness (lumen/module)	Typical Brightness (lumen/ft.)
D170-2	Warm white	3000 K / 4000 K	116	197
	White	5000 K / 6500 K / 7100 K	122	207
	Cool White	8000 K / 10 000 K	116	197
D170-4	Warm white	3000 K / 4000 K	233	284
	White	5000 K / 6500 K / 7100 K	245	299
	Cool White	8000 K / 10 000 K	233	284

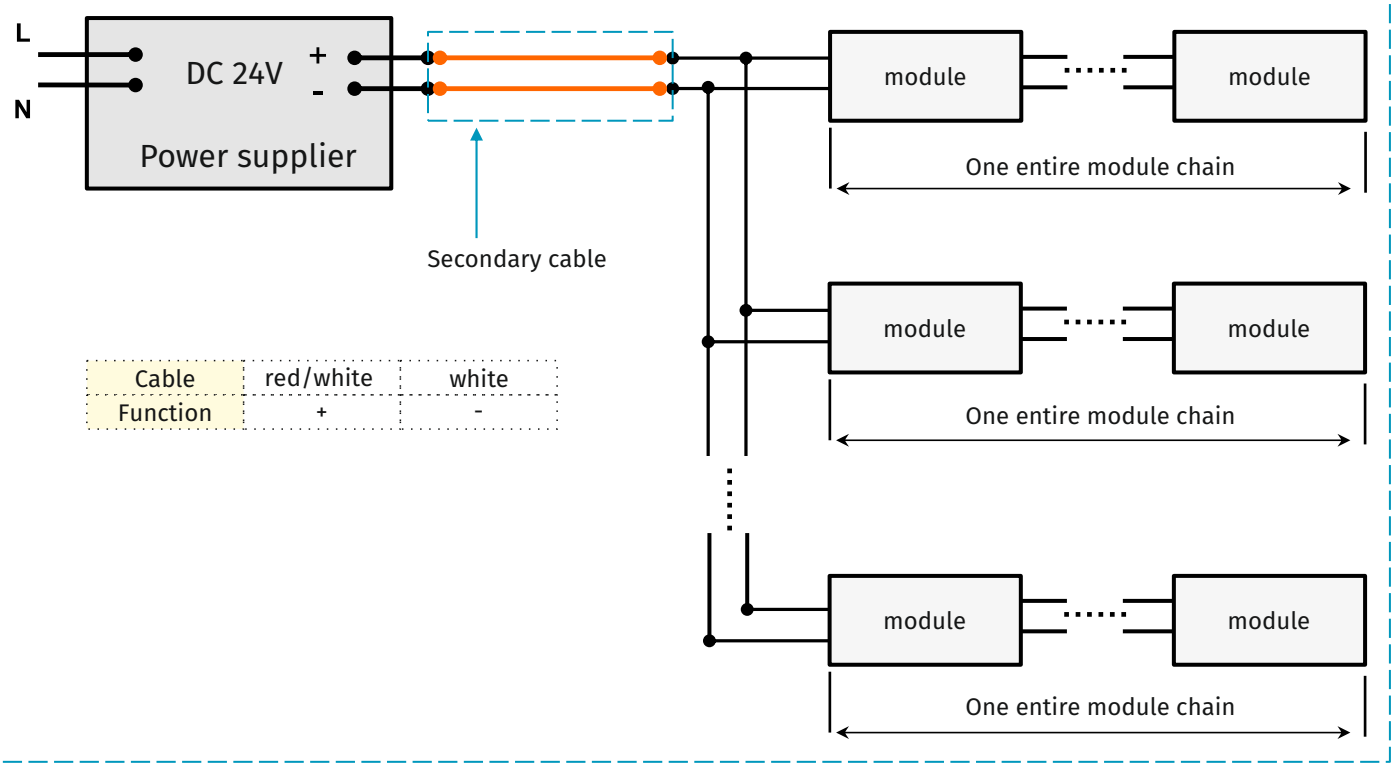
Application conditions and light distribution

Operating Environment (t_a)	-25°C to + 60°C
Storage temperature range (t_s)	-40°C to +85°C
IP Rating	IP67
Lifetime (L70B50)	5 years
tc temperature	80°C
Dimming mode	Dimmable
Cutting resolution	Cut on wire between every module



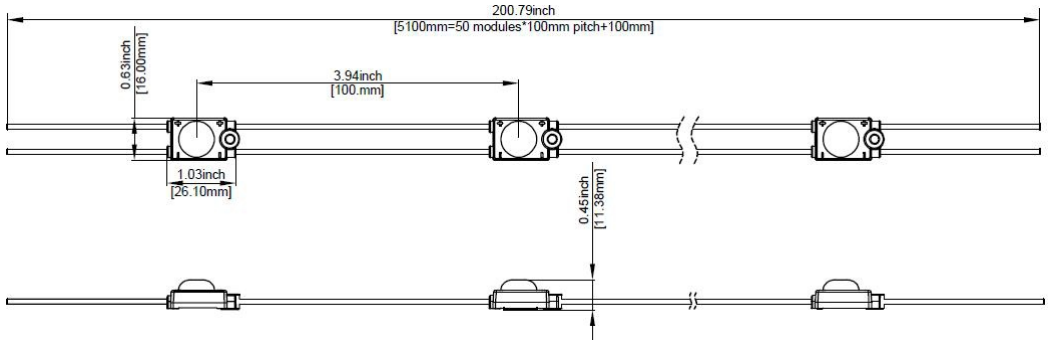
Beam angle 175°

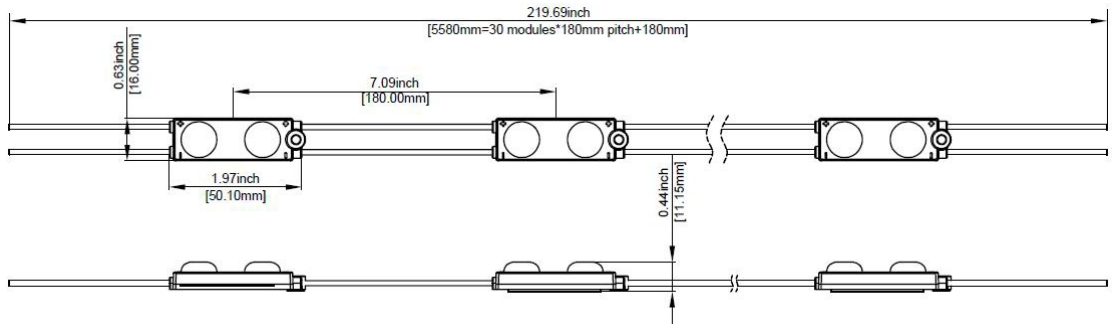
Wiring method

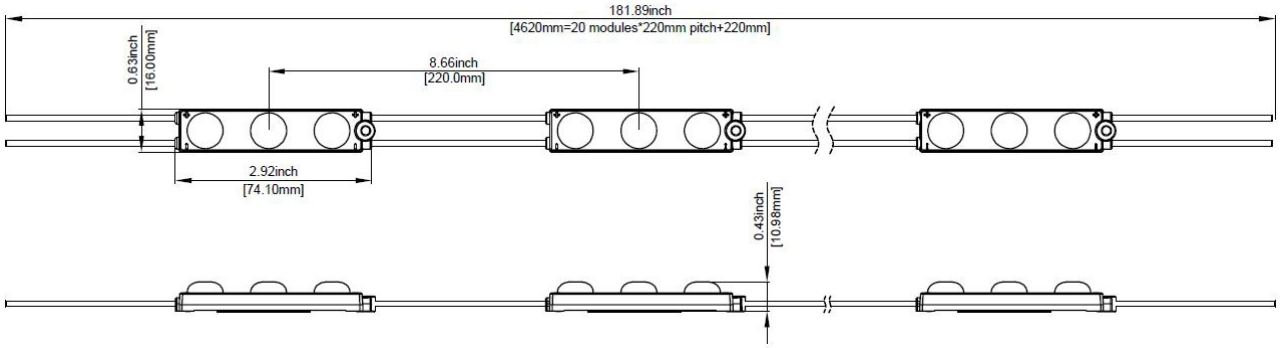


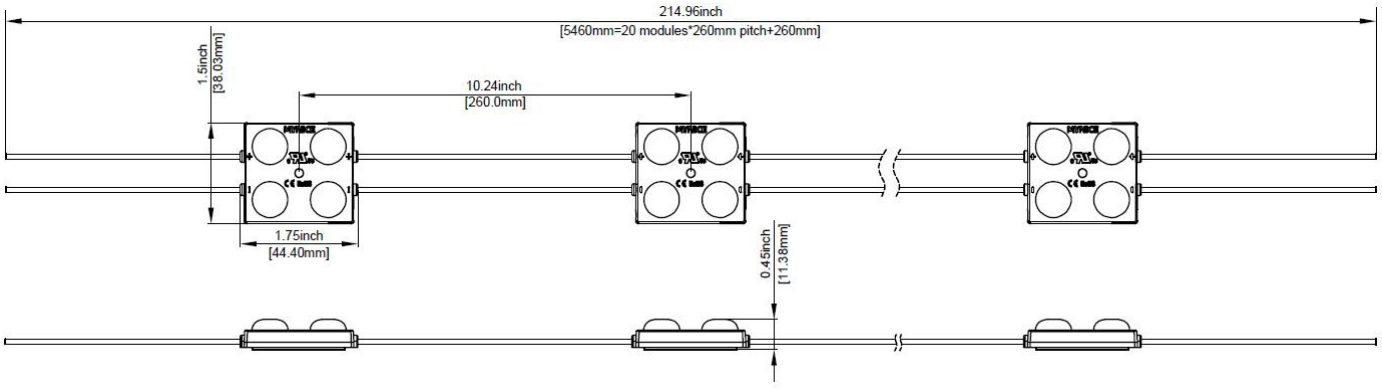
Cable	red/white	white
Function	+	-

Drawing


200.79inch
[5100mm=50 modules*100mm pitch+100mm]
0.63inch
[16.00mm]
3.94inch
[100.mm]
1.03inch
[26.10mm]
0.45inch
[11.38mm]


219.69inch
[5580mm=30 modules*180mm pitch+180mm]
0.63inch
[16.00mm]
7.09inch
[180.00mm]
1.97inch
[50.10mm]
0.44inch
[11.15mm]


181.89inch
[4620mm=20 modules*220mm pitch+220mm]
0.63inch
[16.00mm]
8.66inch
[220.0mm]
2.92inch
[74.10mm]
0.43inch
[10.98mm]


214.96inch
[5460mm=20 modules*260mm pitch+260mm]
1.5inch
[38.03mm]
10.24inch
[260.0mm]
1.75inch
[44.40mm]
0.45inch
[11.38mm]

Package and additional information

Product	Package unit (modules / carton box)	Carton box Dimensions (length x width x height)
D170-1	2800	52 x 37 x 26 cm
D170-2	1400	52 x 37 x 26 cm
D170-3	1000	52 x 37 x 26 cm
D170-4	600	52 x 37 x 26 cm

Additional information

- Installation of LED modules (with power supplies) needs to be made under consideration of all valid regulations and norms.
- Installation by qualified electrician only.
- Parallel connection is mandatory for safe electrical operation. Serial connection of LED modules is discouraged. Unbalanced voltage drop in serial connection can cause hazardous overload.
- Electrical contact is achieved with the contact cables or the terminals of the module. Please refer to the technical data for maximum number of LED modules that can be operated on one control gear.
- To avoid mechanical damage, the LED modules have to be attached securely to the intended mounting surface. It is
- recommended to avoid heavy vibration.
- LED modules are dimmable by means of PWM (pulse width modulation).