MANKUN

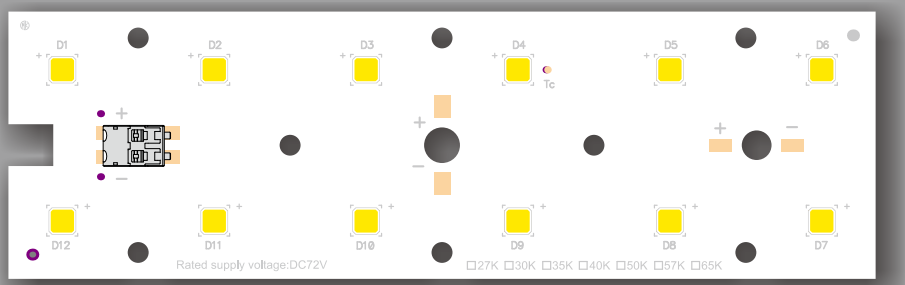
Manufacturer Of LED Lighting Solution

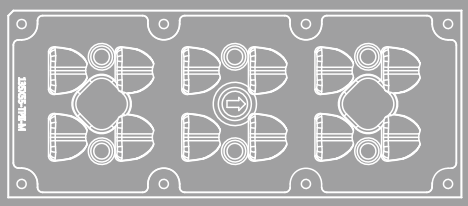
LED LIGHT ENGINES

Dk173 - Outdoor Module(145*45mm)

SMD Terminal Block

0.34-0.75mm





6x2 IP65 HIGH-BAY LENSES OF DARKOO.

DARKOO® Optics

APPLICATIONS

PRODUCT DESCRIPTION

- **Color temperatures (3000 K, 4000 K, and 5000K)**
- **CRI>70 (CRI80 Available on request)**
- **Perfect for existing or new lamps**
- **LED module efficiency of up to 182 lm/W**
- **Excellent color consistency of 5 SDCM**
- **Best in class reliability testing for OEM peace of mind**
- **Long life-time: 50,000 hours**
- **High module efficiency for fixture performance**
- **Wide operating thermal range**
- **Optical flexibility via third party lenses**
- **Instant full light**

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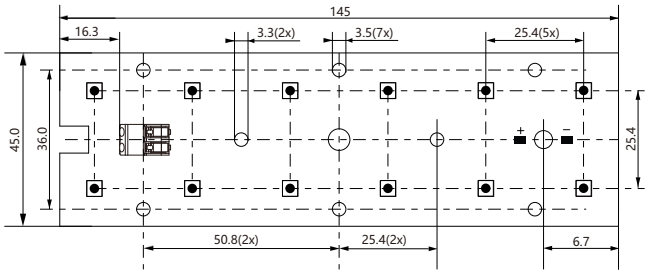
SPECIFIC TECHNICAL DATA

- Dimension MCPCB 145*45mm
- PCB Thickness 1.6mm
- Beam characteristic 120º
- Power Factor > 0.9
- Ambient temperature Ta: -25ºC ...+ 55ºC
- Module temperature Tc max. 85ºC
- Performance temperature Tp 75ºC
- Type of mounting M3 screws
- Wire cross section 0.2...0.75mm^2
- 30 g net weight per module
- MOQ 200 PC/NTC.
- Posibilidad de integrar LOGO Custom

DIMENSIONS (All dimensions in mm).



Wiring - Cablaggio

Ordering data

Commercial product name	PCS/TNC	MEAS	G.W.(KG)
DK173-145X45-5050-12LED-730	200	330*330*170mm	7.5KG
DK173-145X45-5050-12LED-740	200	330*330*170mm	7.5KG
DK173-145X45-5050-12LED-765	200	330*330*170mm	7.5KG

Ordering data

Parameter	Nominal	Life**	Max***	Unit
DK173-145X45-5050-12LED-7xx	180	800	1050	mA

Module temperatures

Parameter	Nominal	Life**	Max***	Unit
Tc（case temperature at Tc point）	45	75	85	ºC

* Nominal value at which typical performance is specified

** Value at which life time is specified

*** Maximum value for safe operation, do not operate above this value

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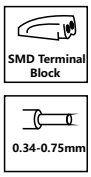

Specific technical data

Type	Typ. luminous flux at tp = 25 °C	Typ. luminous flux at tp = 65 °C	Typ. Colour temperature (CCT)	Colour rendering index CRI	Min. forward voltage at tp = 65 °C	Max. forward voltage at tp = 25 °C	Typ. forward current	Typ. power consumption at tp = 65 °C	Max. forward current	Efficacy of the module at tp = 25 °C	Efficacy of the module at tp = 65 °C
DK173-16205	2,420lm	2,380lm	6,500K	>70	47.0V	53.0V	300mA	13.3W	1440mA	182lm/W	179lm/W
	4,368lm	4,064lm					550mA	25.4W		172lm/W	160lm/W
	7,444lm	6,704lm					1000mA	49.3W		151lm/W	136lm/W
	8,167lm	7,562lm					1200mA	60.5W		135lm/W	125lm/W

1) Integral measurement over the complete module.
2) If mounted with M3 screws.
3) Measured at I = 1,400 mA.
4) HE ... high efficiency, NM ... nominal mode, HO ... high output.
5) Tolerance range for optical and electrical data: ±10 %.

Precautions for Use

Chemical Substances

Certain chemical substances listed below may harm LED modules by causing corrosions which result in reduced luminous flux, color shift, and no light output in the worst case. Please use caution when storing LED modules and designing the luminaire system so that LED modules are not exposed to such chemical substances.

- Examples of harmful chemical substances: Sulfur, chlorine, phthalate, halogen, VOCs (volatile organic compound)
- Example sources of harmful chemical substances: Organic rubber, corrugated paper, lead solder paste, epoxy

When designing a sealed luminaire, one must use silicone based sealing instead of rubber based ones and make sure that there is no source of harmful chemical in the luminaire.

Do not store LED modules with corrugated paper or rubber. It is recommended that LED modules be stored in aluminum moisture barrier bag or PE (Polyethylene) bag together with silica gel.

ESD

This LED module is sensitive to electrostatic discharge. Please handle the module in an environment with appropriate ESD protection measures.

DC Polarity

There is no reverse polarity protection. Please use caution and do not drive the module in reverse polarity. It can damage the module.

Constant Current

This LED module must be driven by constant current LED drivers. Constant voltage driver may damage the module.

LED Handling

LED is a delicate component. Do not touch or apply pressure on the yellow light emitting window of LEDs. This may damage the LED causing no light output.