

The new "GEMMA" series includes a wide range of LED Modules for sign lighting. The exclusive lens with prisms, the high efficiency LEDs and low luminous decay, allow to reduce the quantity of modules required per square meter compared to common modules and to illuminate in a homogeneous and efficient way with significant energy savings. The innovative sturdy structure and the facilitated removal of adhesive protection, significantly reduce installation and maintenance costs.

Modulo LED HM80-2

Applicazioni

- Medium and large size channel letters illumination
- Backlighting of single sided light boxes, depth 50 to 150 mm.
- Linear lighting
- Architectural and decorative applications

Benefits

- The new prismatic lens not only optimally diffuse the light, but it minimize the dispersions allowing a conspicuous increasing of the efficiency and luminous homogeneity.
- The 3M VHB adhesive with the special protective film removal tab offers greater security and speed in fixing operations, contributing to cost reduction.
- Consistent white light 3-step MacAdam
- Color rendering index Ra: > 80
- Production date is marked on back of module for traceability

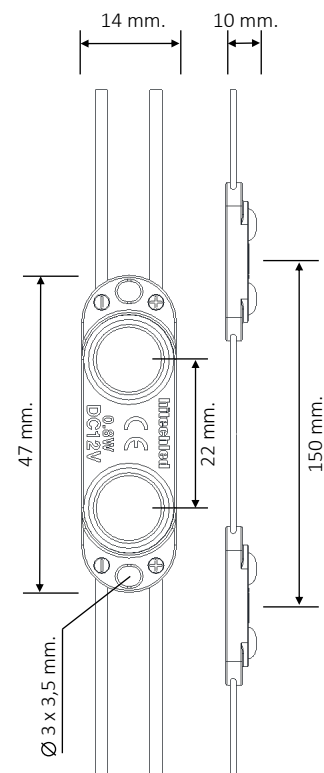
HM80-2

Model	Color	CCT / λd	Lumen
HM80-2CW12	Cool White	8000 k	85
HM80-2W12	White	6500 k	85

Features

Module Operating Voltage	DC 12V
Wattage (W/Module)	0,8 W
IP Class	IP66/IP67
Operating Temperature Range	-40 C° ~ +60 C°
Storage Temperature Range	+5 C° ~ +40 C°
Storage Environment Humidity	RH < 60%
Distance (Centre Module/Module)	150 mm.
Viewing Angle	165°
Life Time (temperature at T _c = 75 °C)	50.000h (L70)
Consistent white light	< 3 SDCM
Chain (No. Modules)	60
Bag (No. Modules)	120
Warranty	5 Years *

*See terms and conditions



Electrical Data

Model	Nominal Voltage	Voltage Range	Accidental reverse input voltage protection up to	Nominal wattage per chain	Nominal wattage per module
HM80-2CW12	12 VDC	11...13 VDC	13 VDC	48 W	0,80 W
HM80-2W12	12 VDC	11...13 VDC	13 VDC	48 W	0,80 W

Photometrical Data

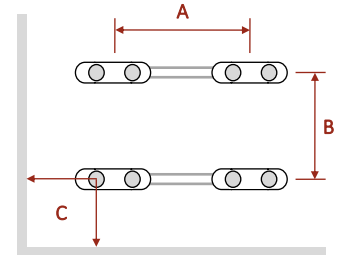
Model	Color	Color Temperature	Color Rendering Index	Typical Luminous Flux	Typical Luminous Efficiency
HM80-2CW12	Cool White	8000K ±5%	> 80	85 Lm	106,2 Lm/W
HM80-2W12	White	6500K ±5%	> 80	85 Lm	106,2 Lm/W

Coding

Model	Code
HM80-2CW12	HTL 000710
HM80-2W12	HTL 000711

Modules Positioning

Light Box Depth	A	B	C
50 mm	70 mm	70 mm	35 mm
60 mm	90 mm	90 mm	45 mm
80 mm	120 mm	120 mm	45 mm
90 mm	140 mm	160 mm	80 mm
100 mm	150 mm	160 mm	60 mm
120 mm	150 mm	200 mm	70 mm
150 mm	150 mm	260 mm	80 mm



The product comply with the following European Standard

<input checked="" type="checkbox"/>	EN 62471: 2008	Photobiological safety of lamps and lamp systems
<input checked="" type="checkbox"/>	EN 62031: 2008+A1: 2013	LED modules for general lighting, Safety specifications
<input checked="" type="checkbox"/>	RoHS2 2011/65/UE	Restriction in the use of hazardous substances in electrical and electronic equipment