


Model	Code	Colour	CCT / λ
HM80-2CW12	HTL 000710	Cool white	8000 k
HM80-2W12	HTL 000711	White	6500 k
HM80-2NW12	HTL 000740	Natural white	4000 k

### Features

Module operating Voltage	DC 12 V
Wattage ( W/Module )	0,8 W
International protection level	IP66 / IP67
Operating temperature range	-40 C° ~ +60 C°
Storage temperature range	+5 C° ~ +40 C°
Storage environment humidity	RH < 60%
IEC protection class ( with SELV power supply )	Class III
Distance ( Centre Module / Module )	150 mm.
Viewing angle	165°
Life time ( temperature Tc = 75 °C )	50.000h ( L70 )
Consistent white light	< 3 SDCM
Chain ( No. Modules )	60 pcs
Bag ( No. Modules )	120 pcs
Warranty ( See terms and conditions )	 5 Year

### Description

The new "GEMMA" series includes a wide range of LED modules for sign lighting. The exclusive optics 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 saving.

The innovative sturdy structure and the facilitated removal of adhesive protection, significantly reduce installation and maintenance costs.

### Applications

- Medium 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 optics not only optimally diffuse the light, but it minimize the dispersion 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.



RoHS



## Data sheet

## Electrical Datas

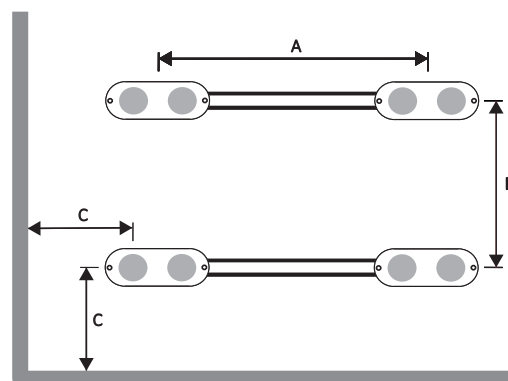
Model	Nominal voltage	Voltage range	Accidental reverse input voltage protection up to	Nominal wattage per chain	Nominal wattage per module
HM80-2CW12	12 VDC	11...13 VDC	13 VDC	48 W	0,8 W
HM80-2W12	12 VDC	11...13 VDC	13 VDC	48 W	0,8 W
HM80-2NW12	12 VDC	11...13 VDC	13 VDC	48 W	0,8 W

## Photometrical Datas

Model	Colour	Colour temperature CCT / $\lambda$	Color rendering index	Typical Luminous flux	Typical luminous efficiency
HM80-2CW12	Cool white	8000 k $\pm$ 5%	> 80	85 Lm	106,2 Lm/W
HM80-2W12	White	6500 k $\pm$ 5%	> 80	85 Lm	106,2 Lm/W
HM89-2NW12	Natural white	4000 k $\pm$ 5%	> 80	85 Lm	106,2 Lm/W

## Modules positioning (approximate indications)

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.	60 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.



## This product comply with the following European Standard: (download pdf)

EMC - Directive 2014/30/EU EN 55015:2013/A1:2015 EN 61547:2009	General safety requirement for luminaires EN 60598-2-20:2015 used in conjunction with EN 60598-1:2015+A1:2018 EN 62031:2020. IEC TR 62778:2014
RoHS - Directive 2011/65/EU IEC 62031	IP protection IEC 60529:1989+A1:1999+A2:2013