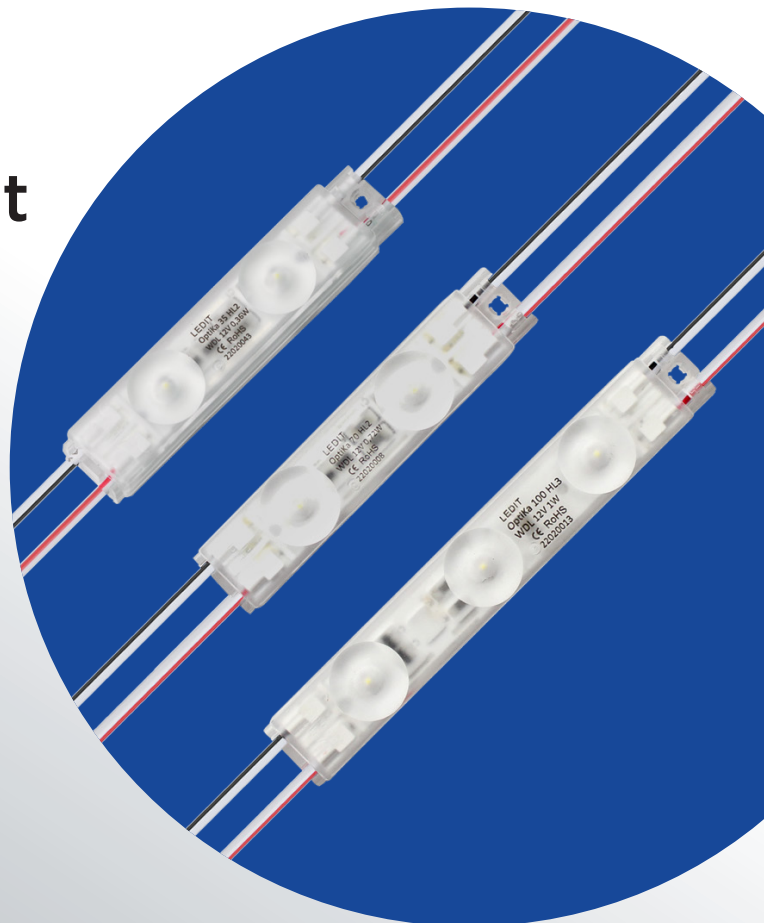


# OptiKa<sup>®</sup> HL

SIGNAGE - Backlighting

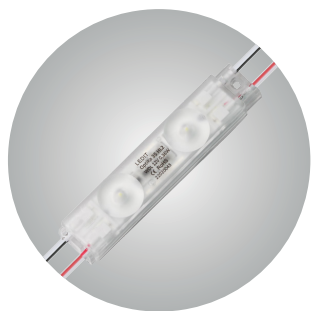
35 70 100

The latest gen of  
OptiKa 777<sup>®</sup>: a result of  
continuous improvement  
to go the extra mile  
giving it all.



**7 YEARS**  
**70.000hrs**  
**L70**

- Premium Optics for best Uniformity
- Top-quality materials to extend Warranty & Lifetime
- MacAdam ellipse 3 to achieve Consistent light
- New design to give you the best Performance & Reliability



**7 YEARS**  
**70.000hrs**  
**L70**



IP67



160°



50 MOD. MAX  
IN SERIES



CUTTABLE  
EVERY 1 MOD.



NO NEED



12V



11 TO 14V



8 TO 5  
MOD./ML



44 TO 22  
MOD./M<sup>2</sup>

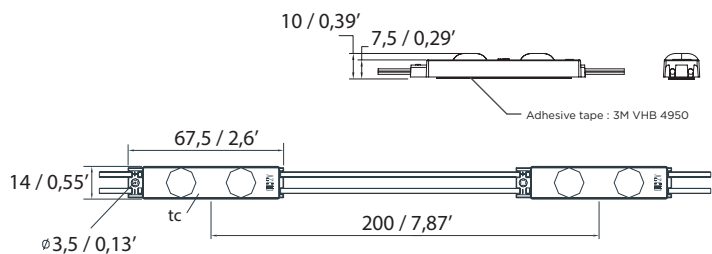


-30°/+50°C

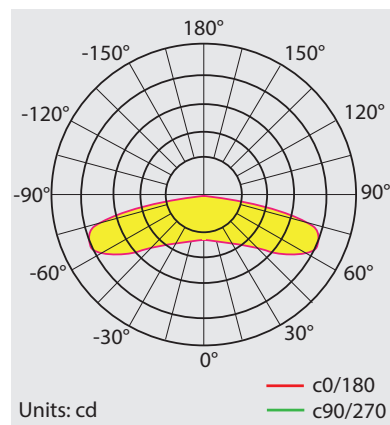
## TECHNICAL DATA

Code	Designation	Color Temperature / Wavelength	Typical power / mod (W)	Lumen output (lm/mod.)	Efficiency (lm/W)	Mod/chain	Mod distance - axe to axe (mm / in)
22020041	OptiKa 35 HL2 WS 50mod 200mm 0.31W 12V IP67	WS 8700-10000K	0,31	31	100	50	200±5 / 7,87"
22020042	OptiKa 35 HL2 OW 50mod 200mm 0.31W 12V IP67	OW 6800-7500K	0,31	33	106	50	200±5 / 7,87"
22020043	OptiKa 35 HL2 WDL 50mod 200mm 0.31W 12V IP67	WDL 6000-6500K	0,31	35	113	50	200±5 / 7,87"
22020044	OptiKa 35 HL2 NW 50mod 200mm 0.31W 12V IP67	NW 3850-4250K	0,31	35	113	50	200±5 / 7,87"
22020045	OptiKa 35 HL2 WW 50mod 200mm 0.31W 12V IP67	WW 2900-3100K	0,31	35	113	50	200±5 / 7,87"

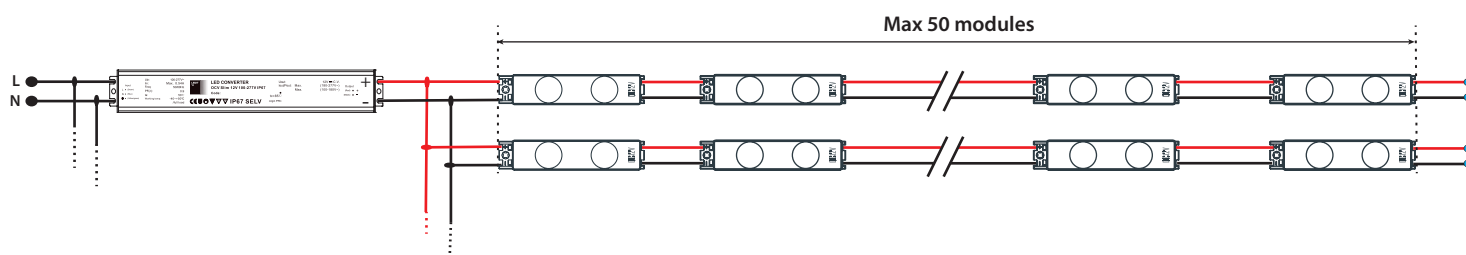
## DIMENSIONS



## LIGHT DISTRIBUTION



## WIRING DIAGRAM



# OptiKa<sup>®</sup> HL SIGNAGE – Backlighting

# 70 HL2



**7 YEARS**  
**70.000hrs**  
**L70**



IP67



160°



50 MOD. MAX  
IN SERIES



CUTTABLE  
EVERY 1 MOD.



NO NEED



12V



11 TO 14V



8 TO 5  
MOD./ML



44 TO 22  
MOD./M<sup>2</sup>



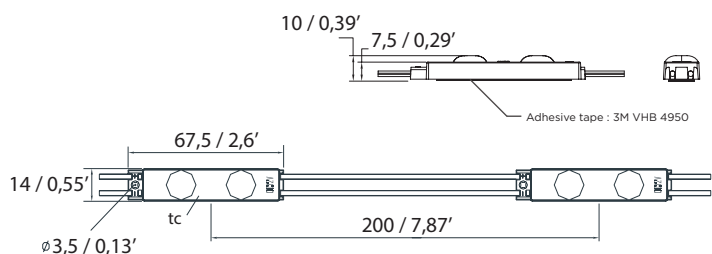
-30°/+50°C

## TECHNICAL DATA

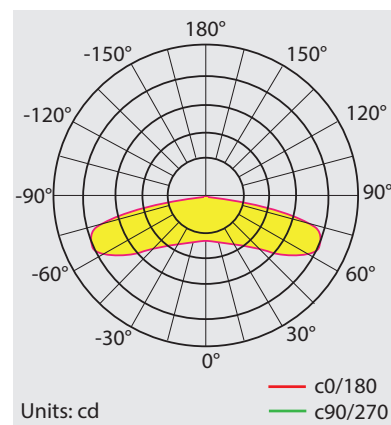
Code	Designation	Color Temperature / Wavelength	Typical power / mod (W)	Lumen output (lm/mod.)	Efficiency (lm/W)	Mod/chain	Mod distance - axle to axle (mm / in)
22020010	OptiKa 70 HL2 WS 50mod 200mm 0.66W 12V IP67	WS 8700-10000K	0,66	63	95	50	200±5 / 7,87"
22020009	OptiKa 70 HL2 OW 50mod 200mm 0.66W 12V IP67	OW 6800-7500K	0,66	67	102	50	200±5 / 7,87"
22020008	OptiKa 70 HL2 WDL 50mod 200mm 0.66W 12V IP67	WDL 6000-6500K	0,66	69	105	50	200±5 / 7,87"
22020007	OptiKa 70 HL2 NW 50mod 200mm 0.66W 12V IP67	NW 3850-4250K	0,66	70	106	50	200±5 / 7,87"
22020006	OptiKa 70 HL2 WW 50mod 200mm 0.66W 12V IP67	WW 2900-3100K	0,66	68	103	50	200±5 / 7,87"
22020067	OptiKa 70 HL2 R 50mod 200mm 0.72W 12V IP67	R 625-630nm	0,72	30	42	50	200±5 / 7,87"
22020068	OptiKa 70 HL2 G 50mod 200mm 0.72W 12V IP67	G 525-530nm	0,72	44	61	50	200±5 / 7,87"
22020069	OptiKa 70 HL2 B 50mod 200mm 0.72W 12V IP67	B 465-470nm	0,72	9	13	50	200±5 / 7,87"

\*These references have a 5-year warranty.

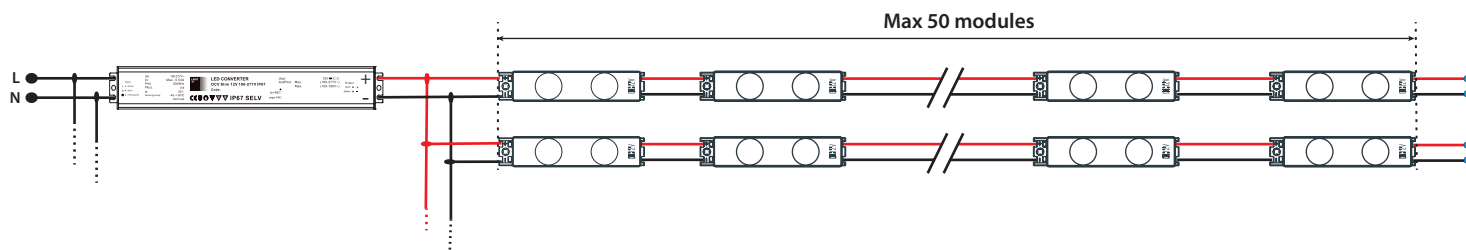
## DIMENSIONS



## LIGHT DISTRIBUTION



## WIRING DIAGRAM





**7 YEARS**  
**70.000hrs**  
**L70**



IP67



160°



30 MOD. MAX  
IN SERIES



CUTTABLE  
EVERY 1 MOD.



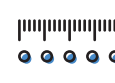
NO NEED



12V



11 TO 14V



5 TO 7  
MOD./M



15 TO 30  
MOD./M<sup>2</sup>

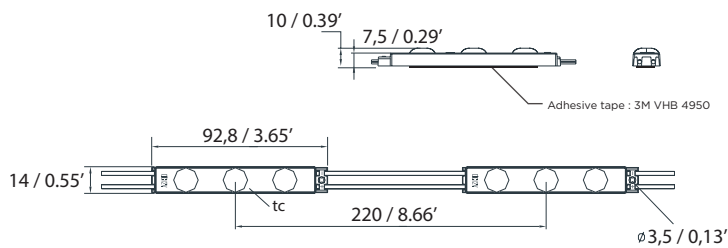


-30°/+50°C

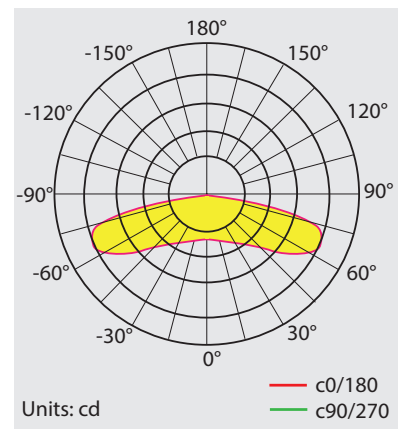
## TECHNICAL DATA

Code	Designation	Color Temperature / Wavelength	Typical power / mod (W)	Lumen output (lm/mod.)	Efficiency (lm/W)	Mod/chain	Mod distance - axe to axe (mm / in)
22020015	OptiKa 100 HL3 WS 30mod 220mm 1W 12V IP67	WS 8700-10000K	0,95	99	104	30	220±5 / 8,77"
22020014	OptiKa 100 HL3 OW 30mod 220mm 1W 12V IP67	OW 6800-7500K	0,95	101	106	30	220±5 / 8,77"
22020013	OptiKa 100 HL3 WDL 30mod 220mm 1W 12V IP67	WDL 6000-6500K	0,95	101	106	30	220±5 / 8,77"
22020012	OptiKa 100 HL3 NW 30mod 220mm 1W 12V IP67	NW 3850-4250K	0,95	96	101	30	220±5 / 8,77"
22020011	OptiKa 100 HL3 WW 30mod 220mm 1W 12V IP67	WW 2900-3100K	0,95	90	95	30	220±5 / 8,77"

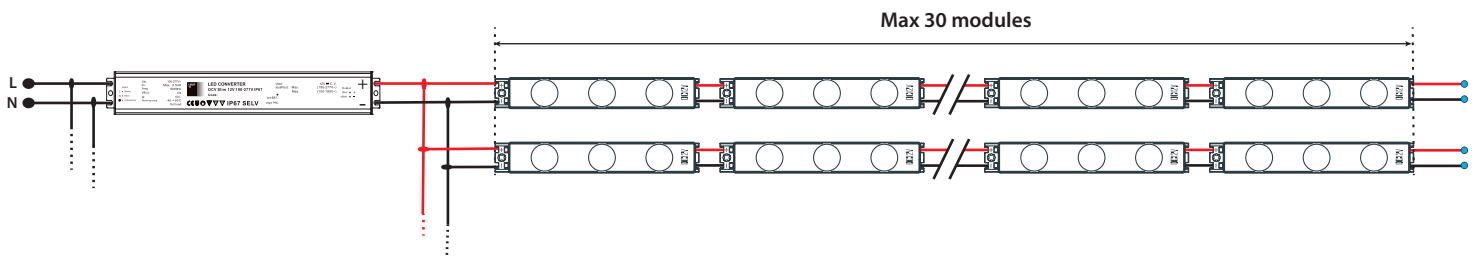
## DIMENSIONS



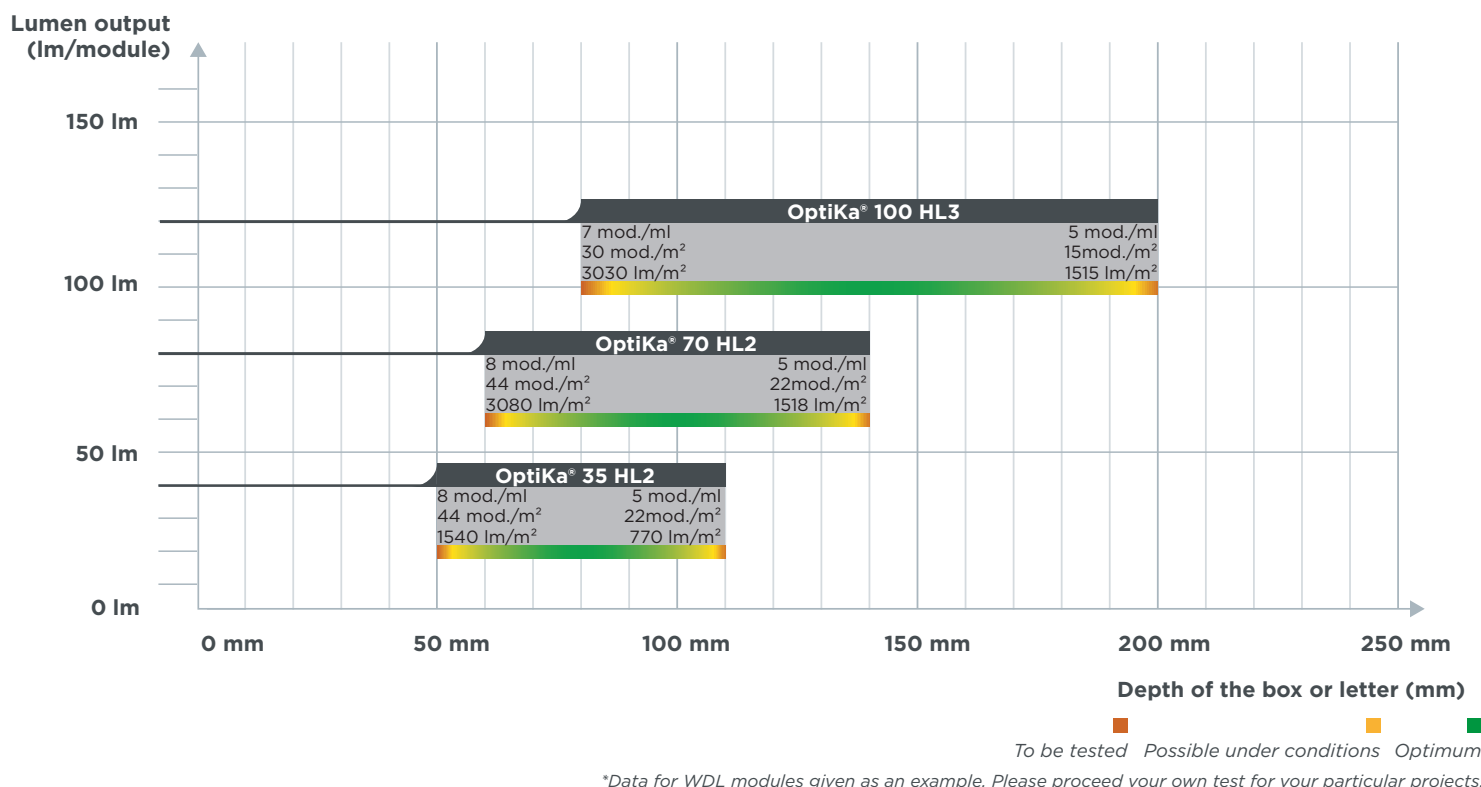
## LIGHT DISTRIBUTION



## WIRING DIAGRAM



### APPLICATION



### INSTALLATION

- ▶ Always connect the LED modules to the power supply while it is OFF. Only then you can connect the power supply to electricity and turn it ON.
- ▶ Respect the maximum number of modules in a row.
- ▶ Check compatibility between LED and driver voltage.
- ▶ Install LED on a clean work station connected to the earth. All LEDs are sensitive to static electricity (ESD).
- ▶ Limit the cable length between LED and power supply (voltage drop).
- ▶ Do not make direct pressure on LED chip, this could damage the internal connection.
- ▶ Secure LED module lines with mechanical fixation (screws, glue ...) in addition to the adhesive tape.

## INGRESS PROTECTION IP67

“Inbuilt LED module” for Indoors or Outdoors.

The specified environmental protection of the LED module enclosure means that it is protected against dust ingress and water immersion up to 1m deep.

The certification requires products to pass a test 30min long at 1m depth. After 30min of submersion, the product could start to be affected or damaged.

Make sure that the application of the LED modules has proper drain holes for water to exit so that modules and any other electronic component are not submerged exceeding the IP67 certification limits.

## NORMS & CERTIFICATES

- ▶ EN55015:2013
- ▶ EN61547:2009
- ▶ EN61000-3-2:2014
- ▶ EN61000-3-3:2013
- ▶ EN62031:2008 + A1:2013
- ▶ IEC62321:2013
- ▶ EN62471:2008



## THERMAL BEHAVIOUR

The temperature limits indicated below are expressed in °C, at full load, after 3h of operation conditions, with natural convection:

- ▶ Operation temperature Ta -30°C to +70°C
- ▶ Storage temperature Ts -30°C to +80°C
- ▶ Max. temperature Tc point +80°C

The life of the module will decrease when the maximum temperature limits are exceeded.

Operating for a continuous extended time at temperatures exceeding the maximum limits, the modules can fail and our warranty will be void.

## WHITE TOLERANCE

In order to ensure there is no color difference visible to the human eye, we adhere strictly to the following tolerance for White LEDs:

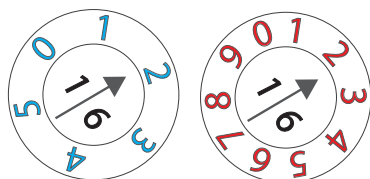
- ▶ MacAdam ellipse 5 between different production batches
- ▶ MacAdam ellipse 3 in the same production batch

## FAILURE RATE

Our LED system has a max failure rate of 0.2% per 1000 operating hours.

## IDENTIFICATION

You can find the following production date code at the back of the module.

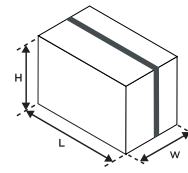


Production's Week **22**

Production's year **2016**

### PACKAGING

Type	SIZE - LxWxH (cm)	SIZE - LxWxH (ft)	Weight (kg)	Weight (lb)	Units
OptiKa 35-70 HL2	40x30x32	1,3x1x1,1	14,5	32	18
OptiKa 100 HL3	40x30x34	1,3x1x1,1	18	39,7	28



(When the min and max values are not indicated, the tolerance range for optical and electrical data is  $\pm 15\%$ .)