



*LED's illuminate your project!*

[www.ledtechnic.be](http://www.ledtechnic.be)

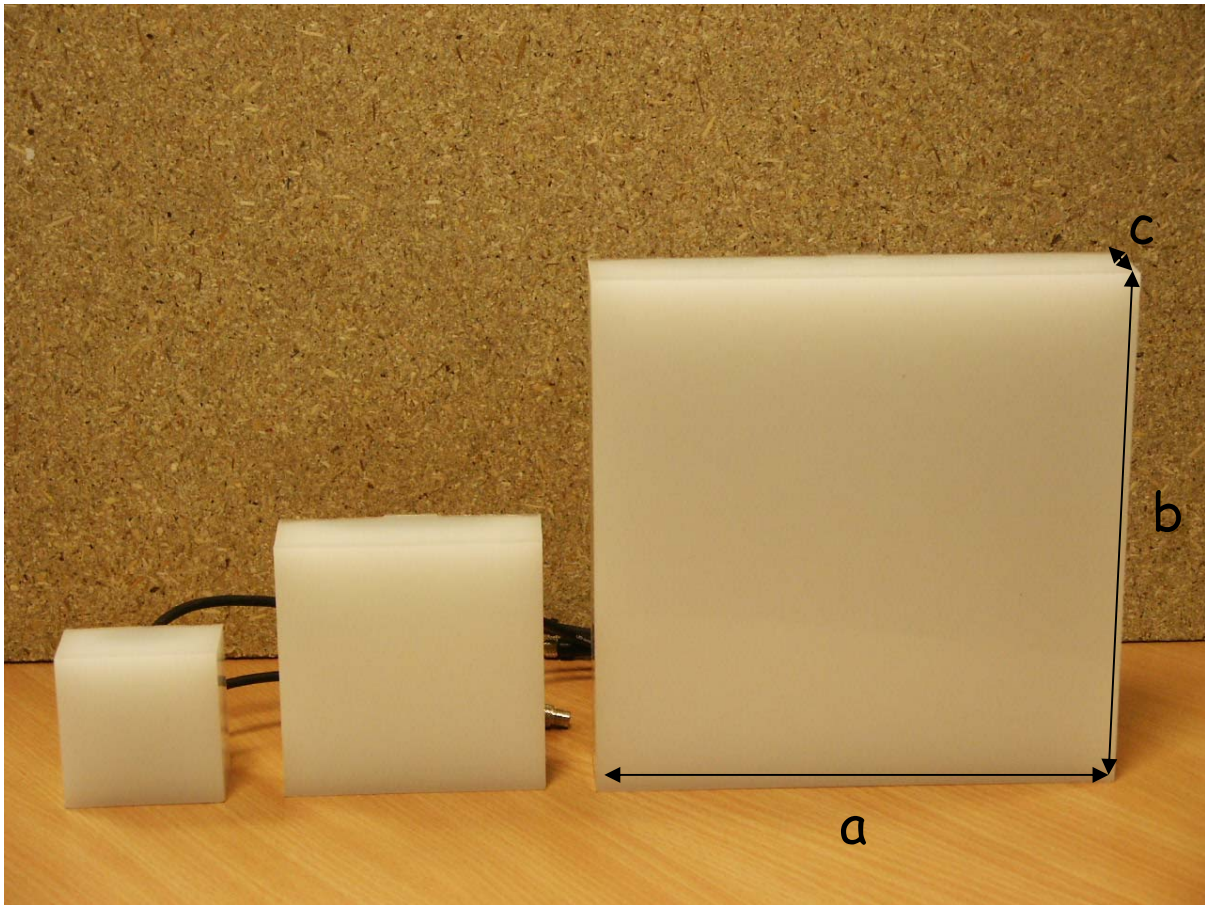
**Product datasheet**



# LEDsquare



1. Available sizes:



Type	a	b	c	kg
LEDsquare 60	60mm	60mm	±22mm	0,3
LEDsquare 100	100mm	100mm	±22mm	0,6
LEDsquare 200	200mm	200mm	±22mm	0,9

2. Available colors:

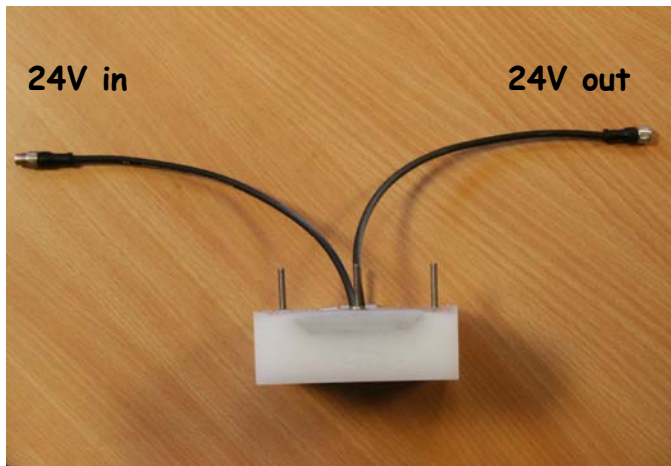
Color
Red
Green
Yellow
Blue
White
Warm White 2800-3175°K
RGB

### 3. Specifications

#### Electrical:

<b>Voltage</b>	<b>24V DC</b>	
<b>Typ. Current</b>	60x60mm	0,05A
	100x100mm	0,1A
	200x200mm	0,4A
	100x100mm RGB	0,21A <sup>1</sup>
	200x200mm RGB	0,91A <sup>1</sup>
<b>IP</b>	<b>67</b>	
<b>Isolation</b>	<b>Class III</b>	

### 4. Wiring



The length of the supply leads is 200mm.

<b>Monocolor</b>	
Brown	+ connection
Blue	- connection
Black	Not connected

<b>RGB</b>	
Brown	+24V DC
White	DMX+
Blue	DMX-
Black	Ground (for DMX and Power supply)

Note: the RGB-driver is integrated in the LEDsquare

<sup>1</sup> R:100% G:100% B:100%

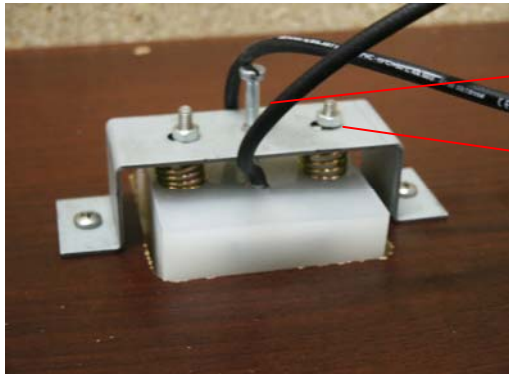
## 5. RGB and monicolor accessories

### 5.1. Mounting bracket

A bracket is needed to mount the LEDsquare.

Our system let's you adjust the height of the luminaries' surface.

60x60mm



Fixation

Adjustment screw

100x100mm



200x200mm



### 5.2. Endcap (Male or Female)



To protect the supply leads that are not used.

### 5.3. Connection cable (Male to Female)



Length	Section
1m /3p	0,25mm <sup>2</sup>
2m /3p	0,25mm <sup>2</sup>
3m /3p	0,25mm <sup>2</sup>
5m /3p	0,25mm <sup>2</sup>
10m /3p	0,25mm <sup>2</sup>
15m /3p	0,25mm <sup>2</sup>
5m /4p (RGB)	0,25mm <sup>2</sup>

### 5.4. Adhesive lined tubing



However our connectors are rated IP67, we recommend using cable sleeving in moisture environments.

### 5.5. Power supply



Power	Output voltage	Voltage adjustment	PFC <sup>2</sup>
25W	24V	±10%	none
75W	24V	-5~+10%	PF > 0,93
150W	24V	-5~+10%	PF > 0,93
500W	24V	±10%	PF > 0,93

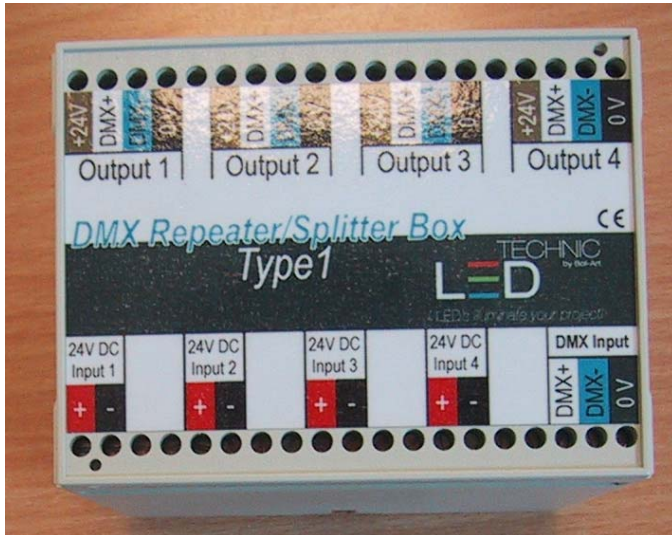
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<sup>2</sup> Power Factor Correction

## 6. RGB accessories

### 6.1. DMX splitter box

A DMX splitter box separates the power supply between different LEDstrings and boosts the DMX signal to each LEDstring.



75x100x110mm (L/W/H)

With one DMX splitter box it is possible to drive 24 LEDlines(1000mm).

### 6.2. DMX terminator (male)



At the end of each DMX-string a resistor of  $120\Omega$  should be placed.

### 6.3. DMX hub cable (male to male)



(See page 6)

Transmits DMX, blocks power supply.

For more information about DMX see "user manual RGB".

## 7. Electrical design rules

- Current through the cables/LEDline may not exceed 4A.
  - Each string has to be fused (4A surge fuse).
- Each LEDsquare has to receive min 22VDC.
  - When the distance between the LEDsquare and power supply becomes large, you have to:
    - Adjust up the output voltage of the power supply.
    - Enlarge the cable section.
- Although a string of several LEDsquares will not generate currents above 4A, the voltage drop becomes important when placing them in one string.