

Custom designed LED lighting armature for Karsan J10 vehicles.

The part is made of blue and white light LED modules, mounted on an extruded aluminium body and a polycarbonate diffuser.

The LED modules are interconnected with pin headers and replaceable.



### Materials

<b>Aluminium body</b>	Extruded aluminium - EN-573-3 AW-6060 AlMgSi 0,5
<b>Electrostatic coating</b>	Polyester powder coating, 0,05-0,10 mm thickness, FF20 custom colour, UV resistive
<b>Polycarbonate diffuser</b>	Extruded polycarbonate, semi-transparent white with light diffuser additives
<b>End taps</b>	PA6 GFR15, custom gray suited to vehicle interiors

### Long Lightbar

<b>White led</b>	192 leds on 14 modules, each 382 mm long Right Side: 5x12 + 2x24 Left Side: 7x12
<b>Blue led</b>	42 leds on 14 modules, each 92 mm long Right Side: 7x3 Left Side: 7x3
<b>Distance between leds</b>	31,75 mm (on modules with 12 and 3 leds) 15,875 mm (on modules with 24 leds)
<b>Length</b>	3.386 mm
<b>White leds brightness</b>	2000-2600 mcd/LED (100° angle)
<b>Blue leds brightness</b>	600-800 mcd/LED (100° angle)
<b>Weight</b>	2,40 kg

## Short Lightbar

<b>White led</b>	168 leds on 12 modules, each 382 mm long Right Side: 4x12 + 2x24 Left Side: 6x12
<b>Blue led</b>	30 leds on 10 modules, each 92 mm long Right Side: 5x3 Left Side: 5x3
<b>Distance between leds</b>	31,75 mm (on modules with 12 and 3 leds) 15,875 mm (on modules with 24 leds)
<b>Length</b>	2.826 mm
<b>White leds brightness</b>	2000-2600 mcd/LED (100° angle)
<b>Blue leds brightness</b>	600-800 mcd/LED (100° angle)
<b>Weight</b>	2,00 kg

## Electrical connection

Three 0.80 x 6,5 mm blade terminals in plastic housing.

White light	12V+ / 0,80 x 6,5 mm male terminal, 0,50 mm white cable
Blue light	12V+ / 0,80 x 6,5 mm male terminal, 0,50 mm blue cable
Chassis	12V- / 0,80 x 6,5 mm male terminal, 0,50 mm black cable
Cable length	Left lightbar: 250 ±10 mm Right lightbar: 60 ±10 mm

## Operation

	<b>Minimum</b>	<b>Average</b>	<b>Maximum</b>	<b>Unit</b>
<b>Voltage</b>	11	-	15	V (DC)
<b>Current (Long lightbar) *</b>	-	770	1000	mA
<b>Current (Short lightbar) *</b>	-	660	850	mA
<b>Operation temperature</b>	-30	-	85	°C

\* Total current of right and left lightbars. Slightly variable due to changes in battery voltage.

Life expectancy

	<b>Minimum</b>	
<b>Brightness / Initial brightness</b>	0,80	Measured after 10.000 hours operation at nominal values (supplier data)
<b>Brightness / Initial brightness</b>	0,50	Measured after 50.000 hours operation at nominal values (supplier data)
<b>Powder coating</b>	10 years	UV resistive, no colour change
<b>Polycarbonate diffuser</b>	10 years	No colour or physical change

Revisions

01	23.12.2009	24 led modules added to product design
02	28.10.2011	Cable length change in right lightbars