

LED Modules E5301 for Railroad Crossing Warning Lights

The 300mm LED modules E5301 are designed for application as red or white light signal sources in railroad crossing warning lights for managing road traffic at level crossings. Powered either by low voltage AC or DC, the modules provide efficient long term operation in field conditions requiring no maintenance other than cleaning the front covers when necessary.

The E5301 modules utilize rugged LED technology capable of providing similar optical output compared to traditional incandescent lamps, while consuming only one-fifth of the power and offering lifetime of ten to fifteen years. The module consists of a disc-shaped light source formed by 5mm LEDs, a circular aluminium back plate, and a protective front cover made of transparent UV-stable PETG plastic. In order to prevent the ingress of dust and moisture, the module is sealed to IP66 and furnished with pressure equalization valve. Since the LED's are colourless by themselves, providing a coloured light beam only when the power is applied, the E5301 modules produce virtually no phantom colour signals. This effect is reduced even further by employing a matte-black surface behind the LEDs.

The E5301 modules are available in one of the two colours: red or white. The modules are supplied with 1m free flying power leads that exit the enclosure at the centre of the back plate, and a set of mounting bolts for installation on a flat vertical host structure.

Features:

Luminous intensity (min / max): 200 cd / 2 000 cd

Luminous intensity distribution: Type W (red); type M (white) Operating voltage: 12.6 VDC to 15.4 VDC, or

12.0 VAC to 15.0 VAC

Nominal current: DC: 720 mA to 880 mA DC

AC: 630 mA to 770 mA AC

Passive resistance equivalent in standby mode: 500 Ohm

Lens diameter (min): 293 mm Flange diameter: 329 mm Module height (thickness) 56 mm

Weight: $2.2 \text{ kg} \pm 0.1 \text{ kg}$ **UV-stable** plastic Front cover material: Operational environment: -40°C to +50°C

IP rating: **IP66** Impact resistance: IR3

Requests for quotations are welcomed at ekta@ekta.ee.

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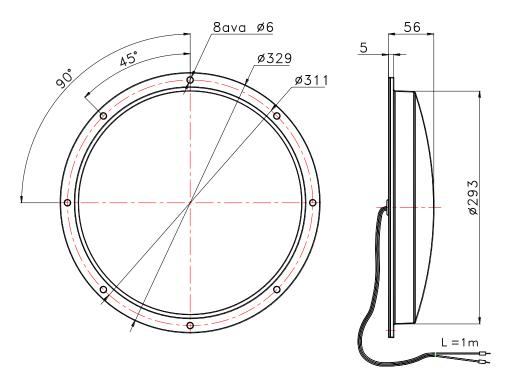


Figure 1. Dimensions of a LED Module E5301

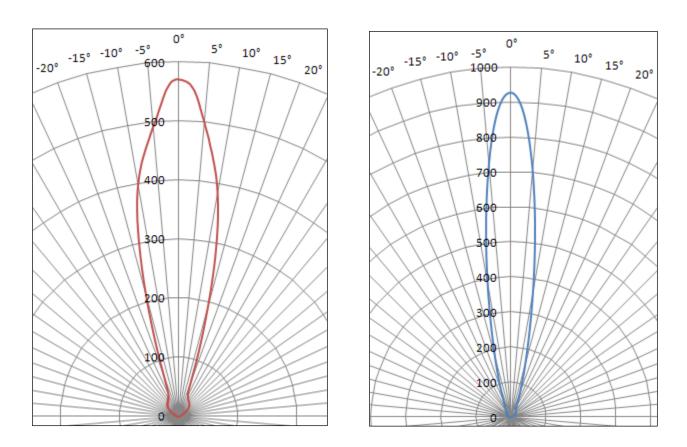


Figure 2. Typical horizontal light signal distribution of LED Modules E5301.R (red light signal, left) and E5301.W (white light signal, right)