

# Dual LED Range Lantern E8516

The Dual LED Range Lanterns E8516 are intended for forming leading lines (ranges) for maritime navigation as a redundant source of a light signal of simplified mechanical design, utilizing two fully independent Luxeon Rebel LED arrays to provide a narrow high intensity light beam. Versions producing white, red, green, blue and yellow light signal and several horizontal divergence angles of the light output are available. Luminous intensities achievable using coloured LEDs are lower than with white LEDs shown in the Features table.

An E8516 consists of a light unit sealed within a polycarbonate enclosure mounted inside a protective stainless steel frame with mounting holes at the outward angled lower sides. The light unit houses two fully independent LED arrays with individual lenses, driven by two independent switching power supply units that allow external control of the light signal by a low-level signal applied to the modulation input. It is fitted with a pressure equalization valve to avoid humidity ingress. Front side of the light unit's enclosure is protected by a field-replaceable transparent UV-stable polycarbonate cover, available from the manufacturer as a standard off-the-shelf spare part (depending on amount of incident solar radiation, recommended checking/replacement interval is in the range of 4 to 10 years).

Direction of the light beam in the horizontal plane is adjustable only slightly, as much as the mounting holes allow; the platform is expected to be prepared for installation without major adjustments. Direction of the light beam in the vertical plane is fixed to the platform plane (not adjustable). Optionally, an E8516 can be supplied in a single LED circuit configuration.

## Features

<b>Luminous intensity</b>	<b>Up to 10,000 cd (White) Up to 4,000 cd (Red)</b>
<b>Horizontal divergence (FWHM)</b>	<b>8° typical</b>
<b>Vertical divergence (FWHM)</b>	<b>8° typical</b>
<b>Nominal range (T=0.74, 1.0 µlx)</b>	<b>Up to 10 M (W), 8 M (R)</b>
<b>Power supply voltage</b>	<b>12 VDC (10 ...25 VDC)</b>
<b>Power consumption in flash</b>	<b>&lt; 6 W</b>
<b>Estimated operational lifetime</b>	<b>&gt; 50,000 hours (L70)</b>
<b>Dimensions (W x H x D)</b>	<b>220 x 160 x 185 mm</b>
<b>Weight</b>	<b>1.7 kg</b>
<b>Mounting hole pattern</b>	<b>90 x 180 mm (Figure 1)</b>
<b>Enclosure protection class</b>	<b>IP67</b>
<b>Operating environment</b>	<b>-40°C to +55°C</b>
<b>Front cover material</b>	<b>UV-stable polycarbonate</b>
<b>Lens material</b>	<b>Optical grade UV-stable acrylic</b>
<b>Body material</b>	<b>Stainless steel frame</b>



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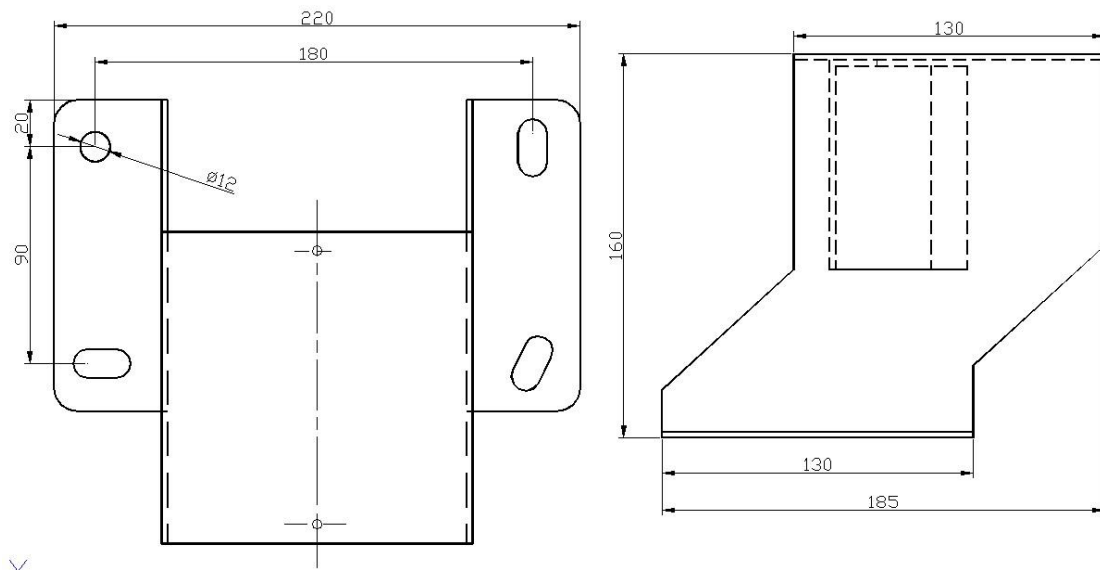


Figure 1. Dual LED Range Lantern E8516: dimensions (excluding cables)

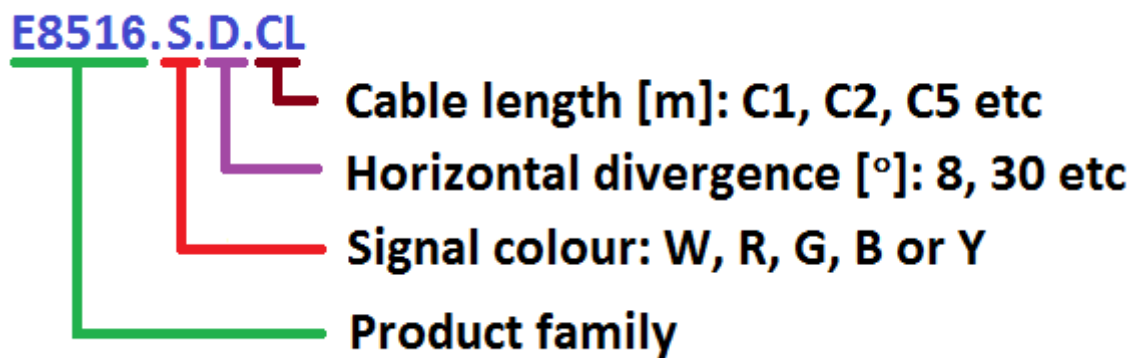


Figure 2. Dual LED Range Lantern E8516: model numbering legend for ordering