

Dual LED Range Lantern E8513

The Dual LED Range Lanterns E8513 are intended for forming leading lines (ranges) for maritime navigation as a redundant source of a light signal, 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 with coloured LEDs are lower than in case of white LEDs shown in the Features table. If necessary, a horizontal beam pattern with wider divergence for near field viewing can be created, as well as asymmetrical beams.

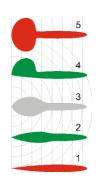
An E8513 consists of a light unit sealed within a polycarbonate enclosure, and of a protective frame of marine grade aluminium which is attached either to an adjustable pedestal for single unit applications, or to a fixed carrier frame in case of forming high-power modular light clusters. The light unit houses two high power LED arrays with individual lenses and reflectors that are mounted onto a heat sink of marine grade aluminium forming a back wall of the enclosure. Two independent switching power supply units allow external control of the light signal by a low-level signal applied to the modulation input. Front side of the light unit's enclosure is protected by an easily replaceable transparent UV-stable polycarbonate cover, available from the manufacturer as a standard off-the-shelf spare part.

Direction of the light beam in horizontal plane is adjustable by rotation of the protective frame with the light unit. Direction of the light beam in the vertical plane is adjustable by tilting of the light unit within the protective frame. The back side of the light unit provides a mount for an optical sighting scope for precise adjustment of the light beam direction.

Features

Luminous intensity (typical)	20 000 / 35 000 cd
Horizontal divergence $2\Theta_{1/2}$	8° / 3°
Vertical divergence 2Θ _{1/2}	8° / 3° typical
Nominal range (T=0.74, 0.2 μlx)	> 15.8 NM / > 17.1 NM
Power supply voltage	12 VDC (1025 VDC)
Power consumption in flash	< 9 W / < 5 W
Estimated operational lifetime	> 50000 hours (L70)
Dimensions (W x H x D)	154 x 228 x 280 mm
Weight	5.5 kg
Mounting hole pattern	4 x Ø14, side 167.5 mm
Enclosure protection class	IP67
Operating environment	-30°C to +55°C
Front cover material	UV-stable polycarbonate
Lens material	Optical grade UV-stable
	acrylic
Body material	Marine grade aluminium
	anodized, powder coated





Please contact ekta@ekta.ee for more detailed information.

Cybernetica AS
Department of Navigation Systems
Mäealuse 2/1, 12618 Tallinn, ESTONIA
www.ekta.ee
e-mail: ekta@ekta.ee







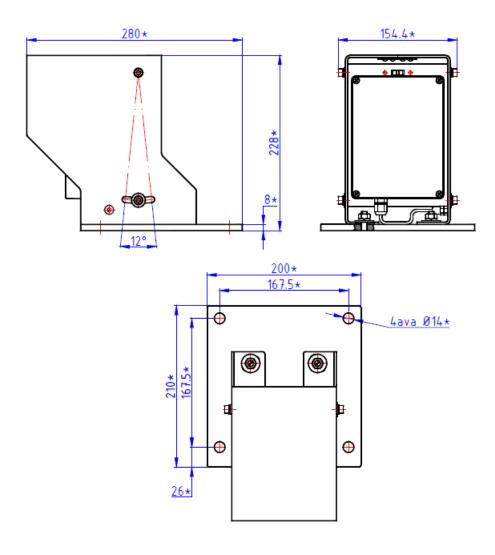


Figure 1. Dual LED Range Lantern E8513: dimensions

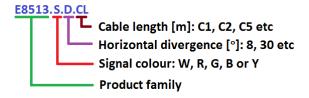


Figure 2. Dual LED Range Lantern E8513 model numbering legend for ordering