E8592

LED Projector sector light signal, up to 17 M range

The E8592 is a high-performance, power efficient marine LED Projector sector lantern with composite beam of three signal colours featuring nearly identical luminous intensities. Sector configuration is tailored to customer requirements at the factory. All E859X Lanterns provide factory configured Day and Night mode luminous intensities selectable by a single digital input, supporting fast PWM control necessary for generating navigational signals at reduced intensities, as well as for utilizing Fixed-and-Flashing (FFL) rhythmic characters or Slow Flash Front (SFF). The field proven E8592 design can be offered with optional Opposite-Isophase sector signal control for producing rhythmic characters reducing the latency of spatial awareness update for the mariners: the white sector signal is active during the eclipse in the coloured sectors and vice versa, resulting in immediate awareness about leaving the white sector without the usual delay caused by the common eclipse. A two-tiered design with two additional sectors providing alternating flashing on sector boundaries is available as E8596.

- Power efficient Day/Night light signalling system for port entry lights or leading line systems replacement
- IALA colours Red, Green, White with application-specific luminous intensities nearly uniform up to 40 kcd
- Factory-customized sector configuration with precision of ≤ 0.05° (3')
- Sector with 3° to 6° with total subtense of approximately 13°



- Vertical divergence either 1.8° or 3°
- Boundary resolution typically better than 2'
- Robust light signal unit
 without programmable parts
 inside for supply either with ekta™
 control and monitoring systems,
 or for integration with third
 party equipment
- Day and Night mode luminous intensities configured in hardware,

- peak value depending on selected colour and horizontal divergence
- Internal optical LED performance diagnostics with condition output
- Available with optional Oppositelsophase sector signal control
- Optionally available in "smart" version with externally integrated flasher and telematics controller with triaxial acceleration sensor integrated on the Lantern for





Vertical beam tilting arrangement

The light module can be tilted inside the protective frame within the limits of ±2°.



Pedestal

Three prolonged Ø16 mm mounting holes on a 200 mm circle.



ekta™ standard cable with plug

The power/signal cable for E859X lights is supplied to site specific length



Bird Deterrents

Stainless steel as standard, mounted at the AtoN site.



Rifle sights

Mechanical parts fitted permanently to the middle of the bottom plate.



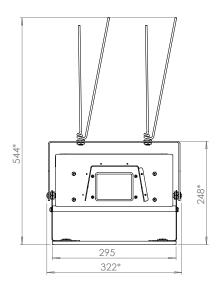
Structural Health Monitoring option

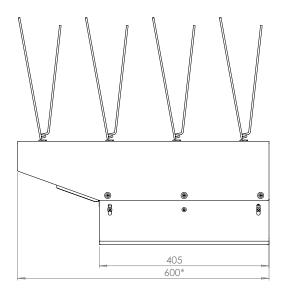
Optional triaxial acceleration sensor integrated on the Lantern for AtoN mast SHM.

Structural Health Monitoring of the AtoN mast

- Easy to install requires only simple procedures for aiming the composite beam vertically
- No maintenance needed where sprinkling of the lens by wave particles or dirt can be avoided

Technical Specification E8592





Optical performance

Number of sectors	3 (R, W, G)		
Typical peak luminous intensity of the light signal per colour	40,000 cd		
Nominal range, Night / Day (T=0.74)	up to 17 M / 2.3 M		
Subtense angle coverage per sector (total approximately 13°)	≤3°	≤3°	≤6°
Vertical divergence, typical	1.8°	3°	3°
Power consumption in flash	≤15W	≤45W	≤80W
Achievable boundary resolution	≤ 0.04° (2′)		
Range of beam adjustment in field conditions, H / V	±6°/±2°		

Main technical specification

Light source	High Power Light Emitting Diodes (LED)	
Vertical divergence	1.8° or 3° (FWHM)	
Lens material	optical glass	
Enclosure material	polycarbonate optical unit potted in resin on aluminium bottom plate, marine grade aluminium protective cover, painted steel mounting plate	
Operating environment	-40 °C to +55 °C	
Power supply voltage	12 VDC (10 24 V)	
Power consumption in flash	up to 80 W depending on configuration	
Degree of ingress protection	IP 67	
Overall height (excl. bird deterrents)	250 mm	
Focal plane height	140 mm	
Installation	3 x #10-14 on 200 mm circle	

3



Order Overview E8592

Option matrix

Sector lights for IALA Region A	E8592.RWG
Sector lights for IALA Region B	E8592.GWR

Accessories

Bird deterrent rod set (incl. screws)	8264.050
Cable Connector, 90deg, female 6 + PE-position	C016 30F006 100 10
Programmable Flasher, integrated	E8672
Programmable Flasher with GPS, integrated	E8672.G
TelFiCon™-Flasher for complete AtoN telematics, integrated	E9272

Product codes

Since this product is usually ordered in AtoN site specific configuration, simple ordering codes covering all possible alternatives are not available. When contacting the supplier for price quotations, please request a spreadsheet for filling in the known requirements for simplifying the process.

Product code example: E8592.RWG.T3

Projector sector light for IALA Region A with integrated TelFiCon™-Flasher E9272

4