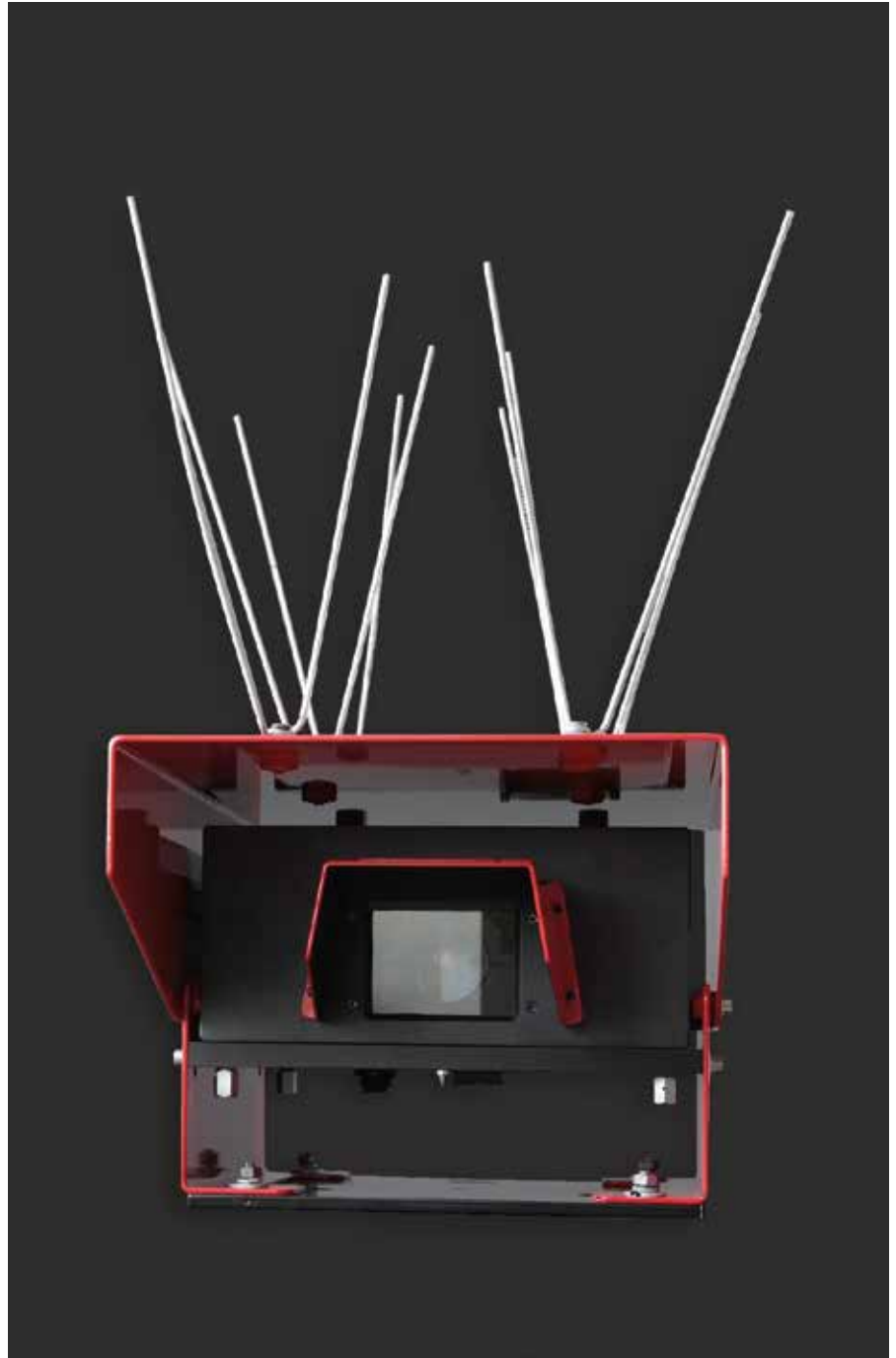


## E8592

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  $\leq 0.05^\circ$  (3')
- Sector with  $3^\circ$  to  $6^\circ$  with total subtense of approximately  $13^\circ$
- Vertical divergence either  $1.8^\circ$  or  $3^\circ$
- Boundary resolution typically better than 2'
- Robust light signal unit that can be equipped with a Sabik SMC Flasher or with external Ekta control and monitoring system
- 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 Opposi-



**Vertical beam tilting arrangement**  
The light module can be tilted inside the protective frame within the limits of  $\pm 2^\circ$ .



**Pedestal**  
Three prolonged  $\varnothing 16$  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.

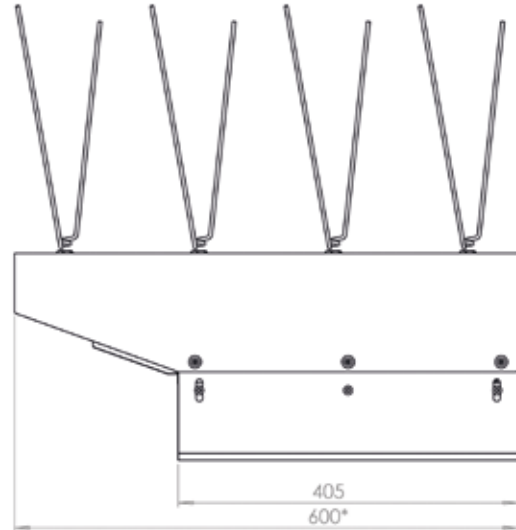
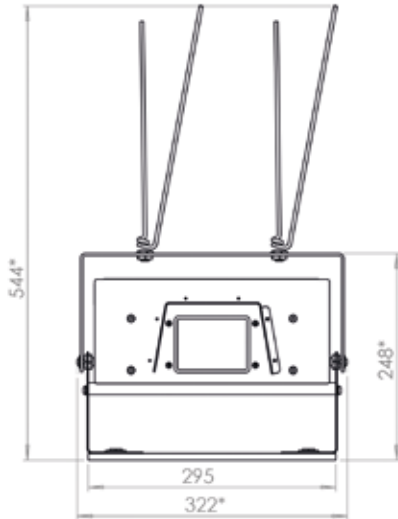


**Structural Health Monitoring option**  
Optional triaxial acceleration sensor integrated on the Lantern for AtoN mast SHM.

- Isophase sector signal control**
- **Optionally available in "smart" version with externally integrated flasher and telematics controller with triaxial acceleration sensor integrated on the Lantern for 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

|   |                    |      |      |
|---|--------------------|------|------|
| <b>Number of sectors</b>  | 3 (R, W, G)        |      |      |
| <b>Typical peak luminous intensity of the light signal per colour</b> | 40,000 cd          |      |      |
| <b>Nominal range, Night / Day (T=0.74)</b>                            | up to 17 M / 2.3 M |      |      |
| <b>Subtense angle coverage per sector (total approximately 13°)</b>   | ≤3°                | ≤3°  | ≤6°  |
| <b>Vertical divergence, typical</b>                                   | 1.8°               | 3°   | 3°   |
| <b>Power consumption in flash</b>                                     | ≤15W               | ≤45W | ≤80W |
| <b>Achievable boundary resolution</b>                                 | ≤ 0.04° (2')       |      |      |
| <b>Range of beam adjustment in field conditions, H / V</b>            | ±6° / ±2°          |      |      |

### Main technical specification

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

## 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.

### Product code example: E8592.RWG.T3

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