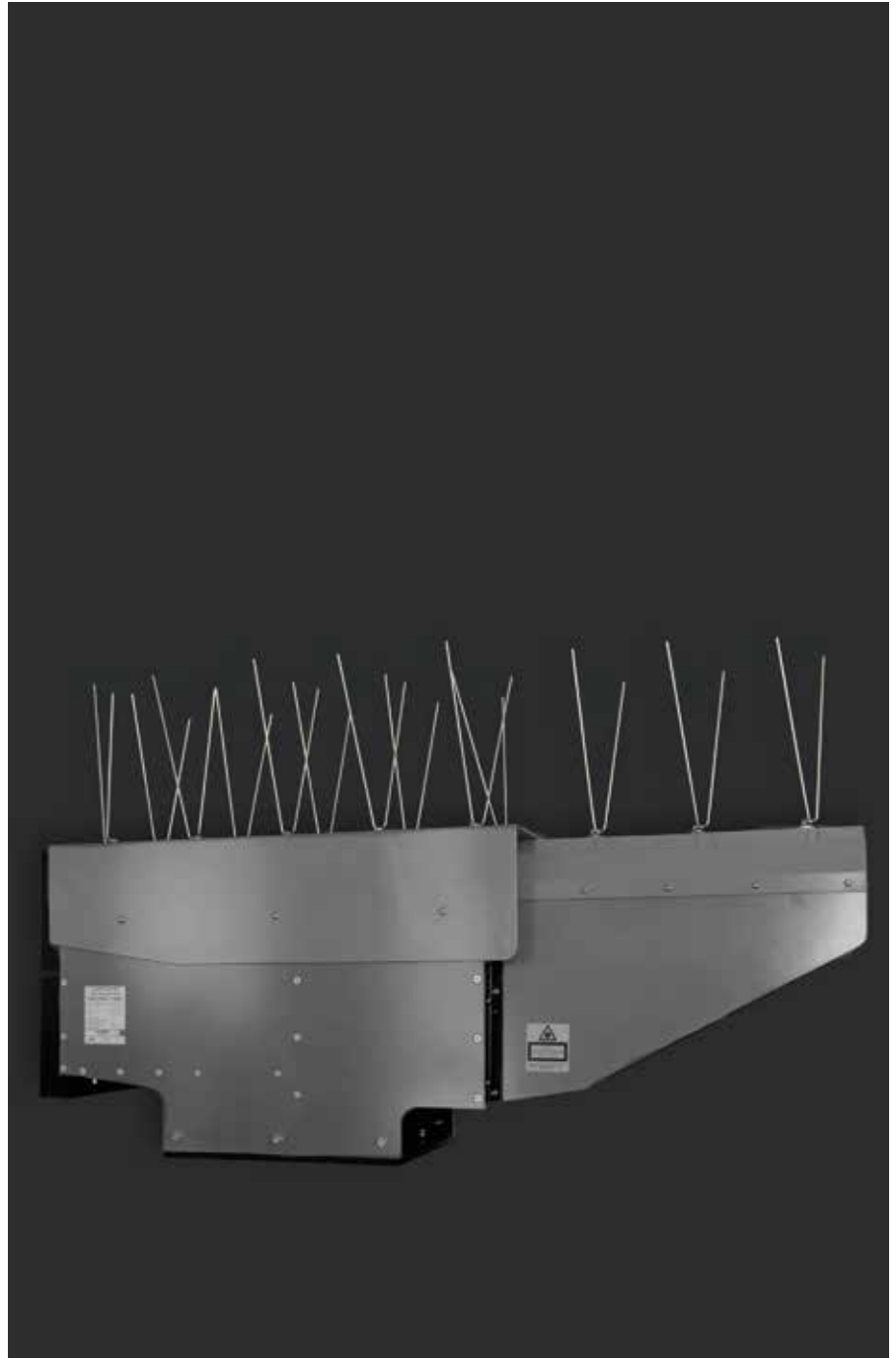


## E8594

LED Projector sector light signal, up to 23 M / 5 M daytime range

The E8594 is a high-performance, power efficient high intensity marine LED Projector sector lantern with beam configuration tailored to customer requirements at the factory. All E859X Lanterns feature factory configured Day and Night mode luminous intensity 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 E8594 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 of coloured sectors and vice versa, resulting in immediate awareness about leaving the white sector without the usual delay caused by the common eclipse. Same two-tiered design with two additional sectors providing alternating flashing on sector boundaries is available as E8595.



- 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 up to 500 kcd
- Factory-customized sector configuration with precision of  $\leq 0.05^\circ$  (3')
- Sector width up to  $2.5^\circ$  with total subtense of approximately  $7.5^\circ$
- Vertical divergence  $1.2^\circ$
- Boundary resolution typically better than 8'
- Robust light signal unit that can be equipped with a Sabik SMC Flasher on with external Ekta control and monitoring system
- Day and Night mode luminous intensities configured in hardware as required - down to 10% by current and further by implementing PWM
- Internal optical LED performance diagnostics with condition output
- Available with optional Opposite-Isophase sector signal control
- Optionally available in "smart" version with externally integrated flasher and telematics controller



**Two-tiered lens design**  
Powerful sector signals with alternating flashing sector configuration capability.



**Significant sail surface**  
Installation quality and mast structure stability are of particular importance at high wind locations.



**Abundant heat sinks**  
Efficient dissipation of heat ensures reliable long term operation.

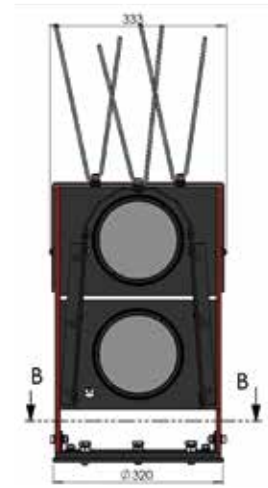
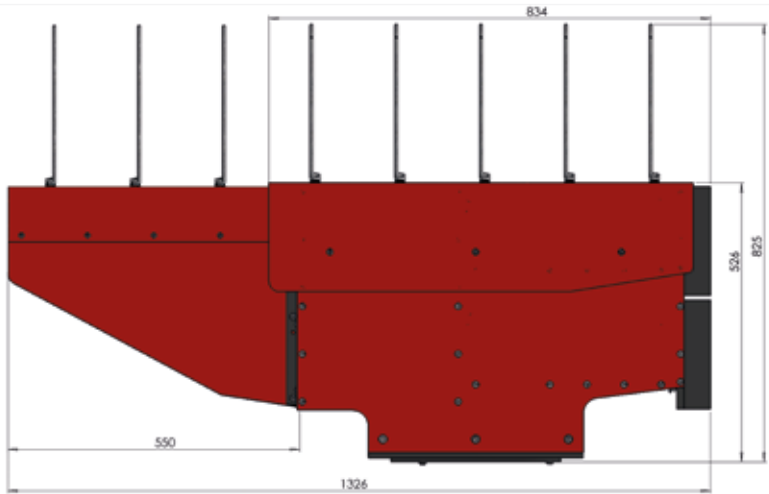


**Rifle sights**  
Alignment is performed by looking through the aperture in the right side of the heat sink.

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 lenses by wave particles or dirt can be avoided

## Technical Specification E8594



### Optical performance

Number of sectors	3 (R, W, G)	
Typical luminous intensity of the light signal per colour	500 000 cd	
Nominal range Night (T=0.74, 0.2 μlx) / Day (T=0.74, 1 mlx)	up to 23 M / 5 M	
Subtense angle per sector (total approximately 7.5°)	≤ 1.2°	≤ 2.5°
Power consumption in flash	≤ 90W	≤ 180W
Vertical divergence (FWHM)	1.2°	
Achievable boundary resolution	~ 0.13° (8'... 9')	
Range of beam adjustment in field conditions, H / V	± 180° / ± 2°	

### Main technical specification

Light source	High Power Light Emitting Diode (LED) clusters
Vertical divergence	1.2° (FWHM)
Lens material	optical glass
Enclosure material	polycarbonate optical unit potted in resin on aluminium bottom plate, marine grade aluminium sides and protective cover, painted steel mounting plate
Weight	≤ 92 kg
Operating environment	-40 °C to +55 °C
Power supply voltage	12 VDC (10 ... 24V)
Power consumption in flash	up to 180 W depending on configuration
Degree of ingress protection	IP 67
Overall height (excl. bird deterrents)	526 mm, width 333 mm, depth 1326 mm
Focal plane height	205 mm
Installation	3 x 14mm on 200 mm circle

## Order Overview E8594

### Option matrix

Sector lights for IALA Region A	E8594.RWG
Sector lights for IALA Region B	E8594.GWR
Sector lights with alternating flashing for IALA Region A	E8595.RWG
Sector lights with alternating flashing for IALA Region B	E8595.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: E8594.GWR.F2.G1

- Projector sector light for IALA Region B with integrated Flasher E8672 and GPS capability