

E8593

LED Projector sector light, up to 21 M / 4 M daytime range

The E8593 is a high-performance, power efficient high intensity marine LED Projector sector light with beam configuration tailored to customer requirements at the factory. All E859X Lanterns feature factory configured Day and Night mode, luminous intensity, fast PWM control generating reduced intensities, as well as Fixed-and-Flashing (FFL) rhythmic characters or Slow Flash Front (SFF). The field proven E8593 supports Oppositelsophase sector signal control 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 delay caused by the common eclipse.

- Power efficient Day/Night light signalling system for port entry lights or leading line systems replacement
- Factory-customized sector configuration with precision of ≤ 0.05° (3')
- Day and Night mode luminous intensities down to 10%
- Internal LED diagnostics with condition output
- Optional Opposite-Isophase sector signal control
- Available with triaxial acceleration sensor for Structural Health Monitoring of the AtoN mast
- Easy to install requires only aiming the composite beam vertically
- No planned maintenance needed



Optical performance

| Number of sectors | 3 (R, W, G) | | |
|--|------------------|--------|--------|
| Typical luminous intensity of the light signal per colour | 250,000 cd | | |
| Nominal range, Night / Day (T=0.74) | up to 21 M / 4 M | | |
| Subtense angle per sector (total approximately 7.5°) | ≤ 1.2° | ≤ 1.2° | ≤ 2.5° |
| Vertical divergence angle | 1.2° | 2.5° | 1.2° |
| Power consumption in flash | ≤ 45 W | ≤ 90 W | ≤ 90 W |
| Achievable boundary resolution | ~ 0.1° (6' 9') | | |
| Beam direction adjustment in field conditions, Hor/Vert | ± 180° / ± 2° | | |





Main technical specification

| Light source | High Power Light Emitting Diode (LED) clusters |
|--|---|
| Vertical divergence | 1.2° or 2.5° (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 | < 50 kg |
| Operating environment | -40 °C to +55 °C |
| Power supply voltage | 12 VDC (10-24 VDC) |
| Power consumption in flash | up to 90 W depending on configuration |
| Degree of ingress protection | IP 67 |
| Overall height (excl. bird deterrents) | 309 mm, width 326 mm, depth 1250 mm |
| Focal plane height | 205 mm |
| Installation | 3 x 14mm on 200 mm circle |
| Cable length | 2 m / 6 m |
| | |

Order Overview E8593

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: E8593.GWR.F2.G1

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

Option matrix

| Sector lights for IALA Region A | E8593.RWG | |
|---|--------------------|--|
| Sector lights for IALA Region B | E8593.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 | |
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