



BR 24-160

MARINE GRADE UNDERWATER

Designed for Marine Electrical Instability
 IP68 | 80V Extended Tolerance | Zero EMI | Integrated Driver
 Thermal & High Voltage Protection

STEIN TECHNOLOGY



Automatic Thermal Regulation
 With Adaptive Power Control



Efficient heat dissipation design
 minimizes overheating and
 reduces fire risk.



EMI-Free Operation

TECHNICAL SPECS

ELECTRICAL DATA

System Power (White)	160 Watt
System Power (Blue)	120 Watt
System Power (White&Blue)	140 Watt
Nominal Operating Voltage	20-30V DC
Extended Voltage Tolerance	Up to 80V DC (temporary operation)
Energy Efficiency	Up to 90%
Dimming	PWM dimmable (compatible with 1-10V and DALI systems via suitable driver)

OPTICAL PERFORMANCE

Luminous Flux	White 20.000 lm — Blue 9.200lm — White&Blue 14.600lm
Luminous Efficacy	125 lm/W
Color Rendering Index (CRI)	≥90
Beam Angle	30° × 60°
Rated Lifetime	L70 lifetime >60,000h
Color Consistency	3-Step MacAdam Ellipse

PROTECTION & SAFETY

Mounting	Surface Mount
Housing	316L Stainless Steel / Marine Bronze
IP Rating	IP68 (Front) / IP67 (Rear)
Certification	RINA Type Approval CE Compliant (EMC & LVD)
Driver Construction	Fully integrated driver (no external plastic box)
Recommended Installation Depth	Up to 10m (surface hull applications)
Pressure Resistance	4 bar – Witnessed by RINA
Impact Resistance	30 Joules (Internal Test)
Lens	3mm Marine-Grade Polycarbonate
Reverse Polarity Protection	Full electronic protection
Surge Immunity	IEC transient protection compliant up to 200V (short-duration spikes)
Warranty	1 Year
COATING WARNING	Warranty Void if Coated

THERMAL MANAGEMENT

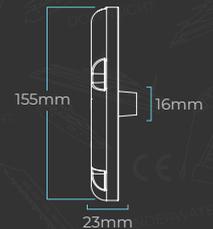
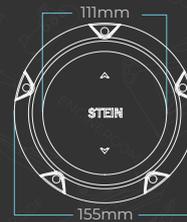
Operating Ambient Temperature	-20°C to +40°C
Max Case Temperature	60°C
Adaptive Thermal Regulation	Continuous thermal monitoring with dynamic current adjustment
Adaptive Overvoltage Thermal Regulation	Automatic current derating under extended voltage conditions

LIGHT COLORS

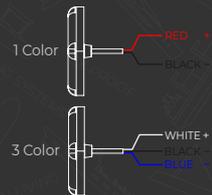
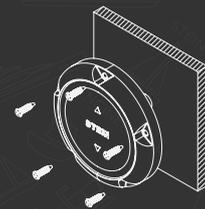


DIMENSIONS

These dimensions can be optionally changed

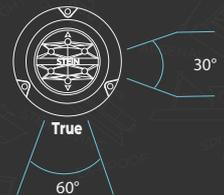


MOUNTING | CONNECTION



Apply marine-grade sealant to the rear contact surface before mounting. Secure with stainless steel screws, tightening evenly to ensure uniform compression and watertight sealing.

BEAM ANGLE



MATERIAL



316L
 Stainless Steel

Marine Bronze

