

LanternFish

LIGHTING
SERIES

Programmable battery-powered LED light

Features

- ▶ Standalone underwater operation to 1,000 m
- ▶ Rechargeable Li-ion battery pack
- ▶ Programmable intervalometer for preset lighting schedules
- ▶ Can be synced to video cameras, still cameras or other oceanographic field sensors
- ▶ Magnetic reed switch for on-deck or diver operation

Technical specifications on reverse.



Arctic Rays specializes in deep-sea lighting and imaging systems and other custom solutions specifically for use on AUVs, ROVs, manned submersibles and other offshore and underwater structures.

Think deep.

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ARCTIC RAYS
SUBSEA TECHNOLOGIES

LanternFish

Technical Specifications

PARAMETER	SPECIFICATION
Model Number	AR103
OPTICAL	
Operating Mode	Continuous torch: dimmable, programmable, battery-powered
Color channels	One
Output	350 Lm @ 5,700K
Color Temperature	4,000K 5,700K standard 6,500K deep blue 450 nm blue 470 nm green 525 nm far red 730 nm
Color Rendering Index	70 min. standard; optional 80 min., 90 min.
Beam Angle (FWHM)	120° standard; 39° optional
ELECTRICAL	
Internal Battery	5,200 mAh lithium ion with internal protection and charging circuitry
Charging Voltage	5 VDC @ 500 mA; standard USB port
Max Input Current	4.2 A @ 24V
Dimming Method	Pulse width modulation; 0–100% duty cycle in 1% increments
PWM Frequency	44 kHz
Endurance	Dependent upon brightness level and duty cycle; typical runtimes continuous: 7 hours @ 100%; 14 hours @ 50%; 28 days @ 25%; 4 days @ 5%
INTERFACE	
Connector	None; Subconn MCBH8M optional
Control	USB 2.0 via Windows-based graphical configuration software
Scheduler Functions	Start time/date, stop time/date, on time, off time, brightness levels
MECHANICAL	
Weight	420 g in air; 190 g in seawater
Materials	6061-T6 aluminum (AHC black); acrylic window
ENVIRONMENTAL	
Depth Rating	1,000 m (3,300 ft)
Temperatures	-10°C to 40°C operating; -25°C to 85°C storage

