

# ViperFish

LIGHTING  
SERIES



## Compact, dual-color LED light

### Features

- ▶ Two-channel, continuous, dimmable torch light for scientific and unobtrusive monitoring applications
- ▶ Dual-color 5,700K white / 720 nm far-red LEDs standard; other color combinations available
- ▶ Up to 5,500 Lm total output (2,750 Lm per channel)
- ▶ High-efficiency integrated driver electronics, ideal for low-power applications
- ▶ 1,000-m- or 6,000-m-rated versions
- ▶ 24VDC supply standard; high-voltage DC and AC options available
- ▶ Multidrop RS232, RS485 (up to 254 soft addresses) or analog dimming control
- ▶ User-settable PWM dimming frequency allows flicker-free operation for various video frame rates
- ▶ Automatic thermal self-protection
- ▶ Durable, hard-anodized 6061 aluminum housing
- ▶ Straight or low-profile connector option

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

# ViperFish

## Technical Specifications

PARAMETER	SPECIFICATION
Model Number	AR 116
<b>OPTICAL</b>	
Operating Mode	Continuous torch; dimmable
Color channels	Two
Output	2,750Lm @ 5,700K per channel (16 W each, 32 W total)
Color Temperature	4,000K   5,700K standard   6,500K deep blue 45 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)	100° standard
<b>ELECTRICAL</b>	
Voltage	9–32 VDC
Power	37 W max
Max Input Current	3.1 A @ 12V
Dimming Method	Pulse width modulation; 0–100% duty cycle in 1% increments
PWM Frequency	44 kHz
Efficacy	149 Lm/W
<b>INTERFACE</b>	
Connector	Subconn MCBH4M or Impulse LPMBH4M
Control	Multidrop RS232 or RS485 (2-wire) serial; 254 soft addresses
<b>MECHANICAL</b>	
Weight	1,000 m: 600 g in air; 318 g in seawater 6,000 m: 700 g in air; 420 g in seawater
Materials	6061-T6 aluminum housing (AHC black); acrylic (1,000 m) or sapphire (6,000 m) window
<b>ENVIRONMENTAL</b>	
Depth Rating	1,000 m (3,300 ft) or 6,000 m (19,700 ft)
Temperatures	-10°C to 40°C operating; -25°C to 85°C storage

