



## Multichannel LED torch light

### Features

- ▶ Ultra-high-output 30,000-lumen, continuous, dimmable torch light for professional HOV/ROV/AUV imaging applications
- ▶ Up to three independently dimmable LED arrays allow white, color-blended or independent tri-color operation
- ▶ 6,000-meter rated
- ▶ High-efficiency, integrated driver circuitry
- ▶ Multidrop RS232 (up to 250 soft addresses)
- ▶ Flicker-free operation for various video frame rates
- ▶ Automatic thermal self-protection

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.

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**ARCTIC RAYS**  
SUBSEA TECHNOLOGIES

PARAMETER	SPECIFICATION								
Model Number	AR 109								
<b>OPTICAL</b>									
Output Lumens, Primary Array	30,000 Lm @ 5,700 K white								
Optional Secondary Array	14 W optical power @ 730 nm								
Color Temperature	4,000 K   5,700 K   6,500 K deep blue 455 nm   blue 470 nm   green 525 nm   far red 730 nm								
Color Rendering Index	70 min. standard; optional 80 CRI, 90 CRI								
Beam Angle (FWHM)	70° (standard); 100° (optional)								
<b>ELECTRICAL</b>									
Input Voltage	200–420VDC								
Power	300 W maximum								
Efficacy	100 Lm/W								
Dimming Control	Multidrop RS232								
Connector	MCBH8M (standard)								
Std. Connector Pinout	<table border="0"> <tr> <td>1. GND (DC)</td> <td>5. N/C</td> </tr> <tr> <td>2. N/C</td> <td>6. 200–400 VDC</td> </tr> <tr> <td>3. RS232 TX</td> <td>7. RS232 CND</td> </tr> <tr> <td>4. RS232 RX</td> <td>8. N/C</td> </tr> </table>	1. GND (DC)	5. N/C	2. N/C	6. 200–400 VDC	3. RS232 TX	7. RS232 CND	4. RS232 RX	8. N/C
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<b>ENVIRONMENTAL</b>									
Depth Rating	6,000 m (20,000 ft)								
Temperatures	-10°C to 40°C operating; -25°C to 85°C storage								
<b>MECHANICAL</b>									
Dimensions	111 mm diameter x 141 mm length								
Weight	1.6 kg in air; 700 g in seawater								
Window Materials	Cast acrylic								
Housing Materials	Aluminum, 6061-T6, AHC black								

