MOOG

Remotely Articulated Illumination Device (RAID)
Integrated System

The Remotely Articulated Illumination Device is a lightweight, compact system designed to operate the Maxa Beam Searchlight by Peak Beam Systems, Inc.

The RAID System is designed to improve situational awareness, eliminate blind areas, improve safety, and support search and rescue missions. This non–lethal system is operated through a simple user interface and rapid "return to home" automatic positioning, providing the quick response an operator needs to quickly deter a threat in emergency situations.

A simple base mount makes deployment or relocation fast and easy. The low profile yoke positioner is highly durable yet extremely reliable in even the most harsh environments. It has been certified to withstand pressure change, extreme temperatures, exposure to solar radiation, humidity, dust and sand penetration, military ground shock and vibration levels and submission.

The Maxa Beam Searchlight is a high intensity illumination system with an output of 12,000,000 Peak Beam CandlePower. It has three light intensity settings and a powerful strobe that makes it a disorienting non-lethal weapon. The searchlight also features mil. spec. metal connectors and a motorized beam width adjustment that allows the user to remotely vary the beam from a 1° spot to a 40° flood.

Low Profile Maxa Beam Searchlight

Positioner Specifications	
Operating Voltage Range:	10 – 13.5 VDC (12VDC nominal)
Total Power:	175 Watts (max) (light/motor/heater shared current) Standby power: < 5 watts
Pan-Axis Range:	180° (±90°)
Pan-Axis Speed (deg/sec):	35, centering @ 45
Tilt-Axis Range:	55° (+30°/-25°)
Tilt-Axis Speed (deg/sec):	35, centering @ 45
Internal Heater:	Included standard, Thermostatically controlled 0°C (32°F) ON • 1.7°C (35°F) OFF
Operating Temperature:	Without Heater: -15°C to 55°C (5°F to 131°F) With Heater: -30°C to 55°C (-22°F to 131°F)
Rotational Limits:	Fixed tilt hard limit, adjustable soft limits on both axes
Feedback:	Magnetic Encoders (0.044° readout)
Repeatability:	0.25°
Duty Cycle:	20%
Motor Type / Drive:	DC Brush motor drives
Communication to Pan & Tilt:	RS422
Connector Specifications:	Mil-Spec grade used on all connectors
Materials / Finish:	Housing 6061-T6 Aluminum, stainless steel hardware, permanently sealed radial ball bearings. Flat black powder coat over alodined chromate for corrosion resistance standard.
Operational Altitude:	Sea Level to 15,000 ft
Ambient Pressure Change:	15,000 ft to 40,000 ft for 15 sec or less
Rapid Temperature Range:	From 71°C to - 46°C (159°F to - 51°F) and from -46°C to 71° C (-51°F to 159° F)
Solar Radiation:	Up to 1,120 Watts/m2
Humidity, Sand and Dust:	Operate in up to 88%
Transportation and Functional Vibration:	Military Ground Levels
Shock Threshold:	Functional, Weapon Firing, Transportation, Crash Safety and Ballistic

Maxa Beam Specifications	
Output:	12,000,000 CandlePower
Visible Range:	3500m (1 lux on target)
Infrared Range:	1400m w/ 850nm IR Filter *(sold separately)*
Strobe Function:	Rate: 1-31Hz Duty Cycle: 3-63% *(controlled by operator)*
Beam Width Adjustment:	1-40° Remote Motorized Control
Lamp Rating:	1500 hr. MTBF Lamp Replacement Recommended at 1000 hrs. *(field replaceable)*
Lens Type:	Reinforced Spyder Front Lens *(field replaceable)*
Environment Rating:	IP67 per CEI/IEC 60529:2001
Operating Temperature:	-15°C to 60°C (5°F to 140°F)
Materials / Finish:	Aluminum housing alodined per MIL-DTL-5541F Type 1, Class 3 for corrosion resistance with matte black polyester power coat finish

This product is subject to export control laws and regulations of the United States government and fall under the control jurisdiction of either ITAR or EAR regulations. Please contact our company Export Representative at +1-716-687-4930 for additional export information.

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