Spectrolab

Illumination and Sensor Systems

www.spectrolab.com

Nightsun®XP IR LED Searchlight System



Illumination Characteristics Visible Spectrum

Lamp type: 1600 Watt Xenon Short-Arc Peak Beam Intensity: 30-40 Million Candlepower Focus Range: 4° (narrow) - 20° (wide)

Focus Control: Bidirectional

Non-visible (IR) Spectrum:

Lamp type: 10 Watt High Power LED Focus Modes: 14° (narrow) / 40° (wide)

Dimming: 0% - 100%

Application Information

Adaptable to helicopters, fixed wing aircraft, maritime

and ground based applications.

Typical Range: 330 ft (1km)
Target ID Range: 1 Mile (1.6km)

Peak Illuminance: 32 Lux (2.9 ft. cd) @ 1km

Diameter at 10% of Peak Illuminance:

230ft @3300ft, (70m @ 1km)

Azimuth Rotation: 344°

Elevation Range: $+2^{\circ}$ to -74° (+/- 1°)

Elevation Slew Rate: 0 - 90° / sec (programmable Azimuth Slew Rate: 0 - 90° / sec (Programmable) Link-ready for imaging systems using RS232/422

Mechanical Characteristics

Searchlight & Gimbal

Maximum Height: 30.15" (76.58 cm) - lookdown Minimum Height: 21.11" (53.61 cm) - max look up

Gimbal Diameter: 12.2" (30.9 cm) Searchlight/Gimbal Weight: 68 lbs. (30.4 kg)

Adjustable Hard Stops in Azimuth and Elevation

AZ = 24 adjustable positions (15° increments) EL = 10 adjustable positions (6.5° increments)

Hand Controller

Dimensions:

Width: 4.0" (10.2cm)
Length: 9.0" (22.9cm)
Depth: 4.0" (10.2cm)
Weight: 2.0 lbs (.91kg)

Junction Box

Dimensions:

Width:6.0" (15.2cm)Length:7.0" (17.8cm)Depth:5.0" (12.7cm)Weight:6.1 lbs (2.8kg)

Electrical Requirements

Input Voltage: 28 Volts nominal

(26.5 - 29.0 VDC)

Input Current: 65 Amps nominal

12 Amps nominal in IR Mode

Start TIme: 3 - 5 seconds typical Recycle TIme: None Required

Options / Accessories

Input/Output Kit for dual control capability Sidecar Control Box offers independent us or for pairing with EO Sensor Hand Controller.





