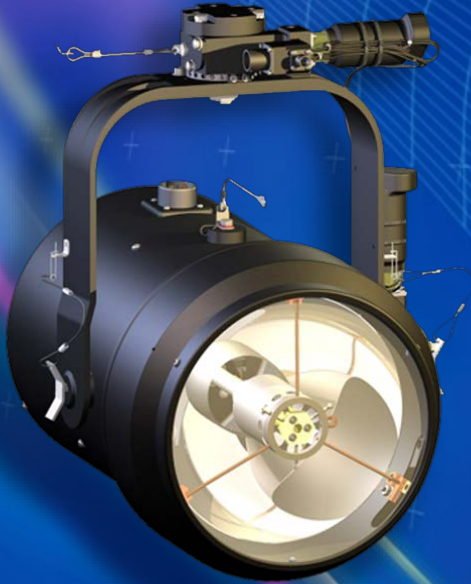


SX-16 Nightsun® Enhanced

www.spectrolab.com

Product Highlights

High Intensity Searchlight System



Key Features:

- 20% More Light Output
 - 50 Million Candlepower Peak Beam Intensity
 - 40 Million Candlepower Typical
- 40 Lux (2.9 ft-cd) Peak Illuminance @ 1 km
- 60,000 Lumens Lamp Output
- Increased Lamp Life
- Increased Beam Stability
- Improved Directional Control
- Bidirectional Focus, variable - +/- zoom
- RTCA/DO-160 and MIL-STD-461C Compliant

Applications

Air, Land, and Maritime applications in Law Enforcement, Fire, SAR, and EMS operations requiring best in class support, reliability, and long range illumination.

System Description:

SX-16 Nightsun® Enhanced Searchlight improves upon the standard Nightsun® Searchlight workhorse with increased performance features and reliability for a better user experience. The new Enhanced Searchlight System offers two way focus, a lamp hour meter, and brushless cooling blower with a life expectancy of 25 times over the standard cooling blower found in our standard configuration. The new Enhanced Control Box adds the ability to smoothly steer and control the Searchlight and Gimbal for precise movements, along with the added ability to control the two way focus and lamp with dedicated system and lamp switches to improve lamp life through a new mode of operation. The new Enhanced Gimbal Assy offers a new more rigid and stronger, solid Arm with no life limit, along with a new internal gearbox improvements that significantly reduce backlash, resulting in a Gimbal that drastically improves Searchlight beam stability. Various configurations of the SX-16 are available, including our SpectroLink configuration, which adds slaving capabilities for linking to E/O Sensor Turrets, and/or moving map systems.

SX-16 Nightsun[®] Enhanced

Illumination Specifications

Lamp Type	1600 Watt Xenon Gas Arc Lamp
Peak Candle Power	50,000,000 (MCD)
Nominal Candle Power	40,000,000 (MCD)
Lux	40 Lux (3.7 ft.-cd) Peak Illuminance @ 1 km
Lumens	60,000
Beam Diameter 10% Peak Illuminance	230 ft. wide @ 1,968 ft. 70 m wide @ 1 km
Focus Range	Variable 4° to 20° (Beam Width)
Typical Useful Range	1 mile / 3,300 ft., 1.6km

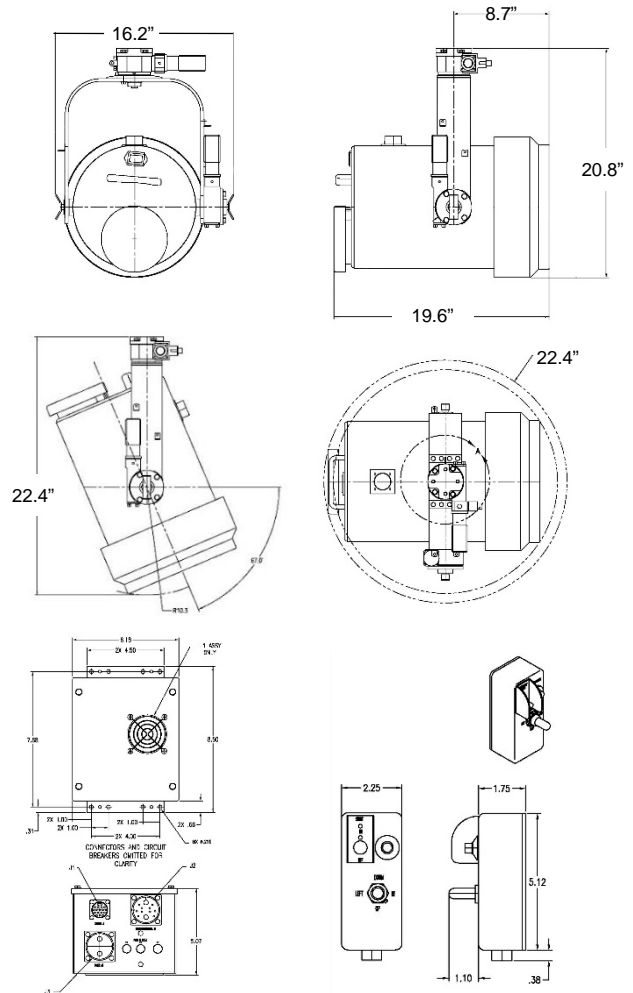
Electrical / Interface Specifications

Input Voltage	28 Volts DC, Nominal
Input Current	55-62 Amperes < 3 Amperes in standby
System Control Interface	<ul style="list-style-type: none"> • System Aux On/Off <ul style="list-style-type: none"> • Cooling • Directional Control • Lamp on/off • Two-way focus (zoom +/-) • Variable Slew Rate via pressure sensitive joystick
Start Time	3 – 5 seconds
Slew Rate	Variable Standard = 9° per sec max High Speed = 18°/sec max

Mechanical Characteristics

Operating Temp.	-40°C to +70°C
Searchlight & Gimbal Weight	34.7 lbs. with Alum. Gimbal 40.7 lbs. with Steel Gimbal
Junction Box Weight	7 lbs. (3.2 kg)
Control Box Weight	13 -18 oz. (368 grams)
System Weight	55-70 lbs. (25-31kg)

Envelope Specifications



Optional configurations include SpectroLink

Reference Documents

Document Title	Document Number
System Cabling Diagram	032431
Envelope Drawings	032427
Operation Manual	031734

