

Illumination Technologies, Inc.



Innovative Photonic Solutions

4900

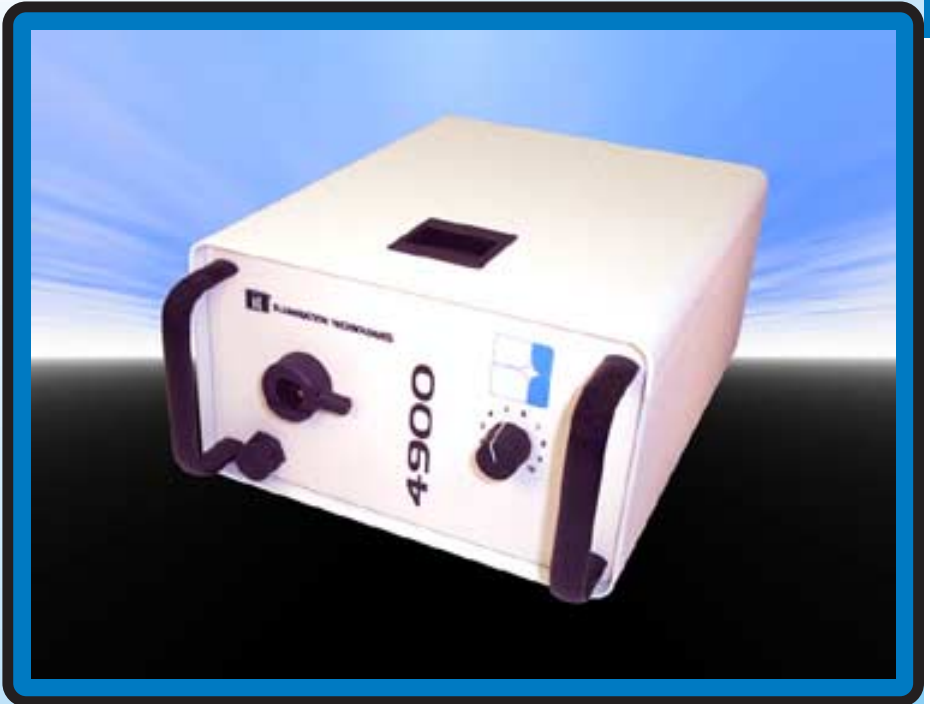
Auto Cal™

Self Calibrating Fiberoptic Lightsource

Lightsources

KEY FEATURES

- Fiberoptic Lightsource
- Linear DC Regulation
- **Light-Lock**™ Light Feedback
- +/- 3% Repeatability on Lamp Replacement
- +/- 4% Unit to Unit Repeatability
- RS-232/485 Interface
- Ethernet Option Available
- Operator Lock-Out
- Internal Self Diagnostics
- **Soft-Start** Circuitry
- Lamp Status Indicator



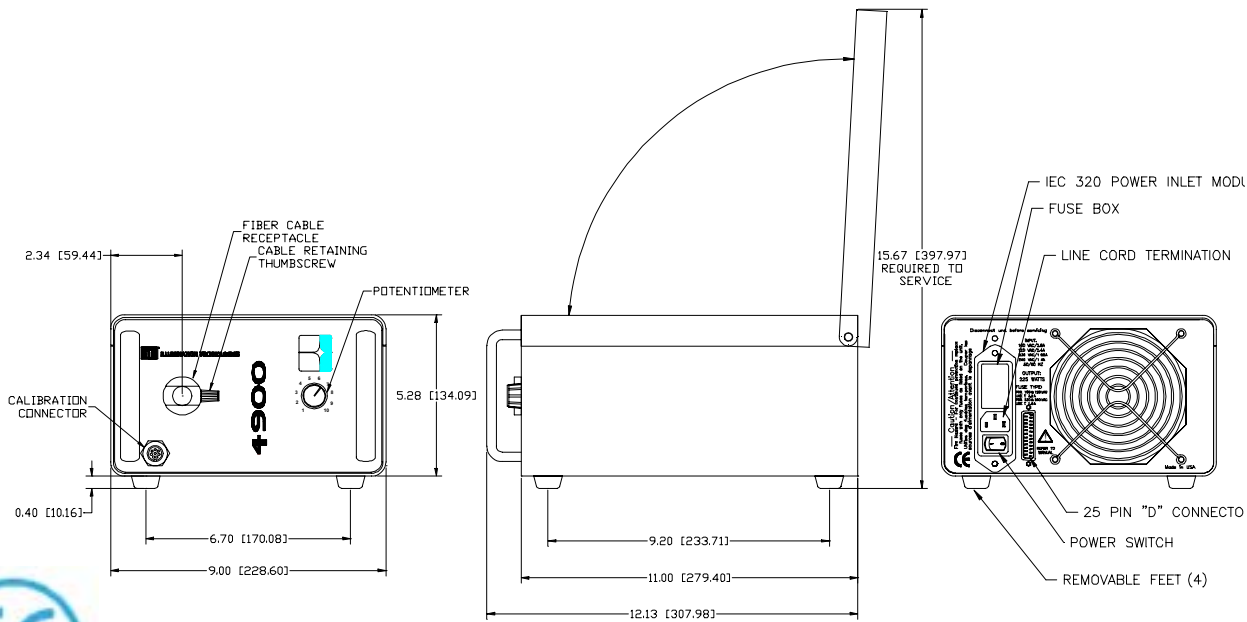
Supreme Stability

Variation of photonic output can change as much as 40% when replacing lamps in a tungsten halogen lightsource. Even with our proven light feedback technology variation can be as much as 10%. That's why Illumination Technologies has developed the **4900 Auto-Cal**™. The **Auto-Cal**™ is an automatically calibrating lightsource. On lamp replacement you simply plug in the **4910** calibrator and press the calibration button. The **4900** does the rest. The lightsource enters calibration mode and makes the necessary adjustments to ensure that the photonic output is within +/- 3% of the previous lamp and all lamps thereafter. The unit will also be within +/-4% of any other **4900**. No more software tweaks when lamps are changed. Plus the **4900** has all the incredible features of the **3900 Smart Lite**™ including robust, linear DC Regulation with the proprietary **Light-Lock**™ light feedback system to provide the most stable light intensity and spectral output in the industry, internal self-diagnostics, and RS-232/485 serial communications. Ethernet communication is also offered as an option. The system will even tell you when a lamp can't be adjusted to the proper photonic output so that system performance will not be affected, and sudden lamp failures are avoided.

APPLICATIONS

- Machine Vision
- Scientific Imaging
- Low Cost Vision Sensors
- Line Scanning Systems
- Colorimetry
- Digital Microscopy
- CMOS Sensor Calibration
- Biotechnology

Detail Drawing



DXF file Available

Technical Specifications

Physical

Height: 5.68" (145mm)
 Width: 9.00" (230mm)
 Length: 12.13" (310mm)
 Weight: 9.0lbs (4.1kg)

Output Stability

Regulation: 0.1% (Photometric)
 Noise: 0.1% (Photometric)
 Long-term: 1.0% (Photometric)
 Lamp to Lamp: 3.0% (Radiometric)
 Unit to Unit: 4.0% (Radiometric)

Control

Manual: Front Panel Pot
 Analog: 0-5 VDC (Linear)
 Serial: RS-232 or RS-485
 SS Relay: Analog & Serial
 Ethernet: Optional

Electrical

Input: 88-132 VAC/60Hz
 Power: 176-264VAC/50Hz
 Inrush: 100/120V 2.15A
 Current: 220/240V 1.10A
 Overvoltage: Category II

Regulation Scheme

Short-term: Linear DC Regulator
 Long-term: Optical Light Feedback

Diagnostics

Lamp Out: Analog & Serial
 Over Temp: Analog & Serial

Environmental

Temperature: 0 to 40C
 Relative Humidity: 0 to 95%
 Altitude Rating: 2000m (max)
 Pollution Rating: Pollution Degree 2

Lamp

150W, 21V EKE (Ushio)

Proudly Distributed By:



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