



Innovative Photonics

KEY FEATURES

- **Fiberoptic Lightsource**
- **Precision 1000-position Iris**
- **Automated Computer Control**
- **Light-Lock™ Light Feedback**
- **RS-232 (Ethernet Option)**
- **Operator Lock-Out**
- **Internal Self Diagnostics**
- **Lamp Status Indicator**
- **Soft-Start Circuitry**
- **Range: 0.0-3.0 Optical Density**
- **Linear & Log Ranges**

APPLICATIONS

- **Hyperspectral Imaging**
- **Photodiode Testing**
- **Medical Diagnostics**
- **Digital Microscopy**
- **CCD/CMOS Sensors**
- **Flat Panel Manufacturing**
- **Research & Development**

CF1000-IRIS

Automated Iris for Constant Color Temperature



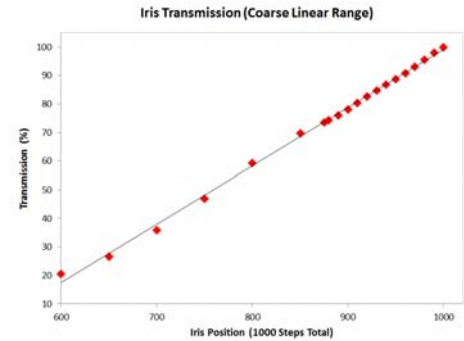
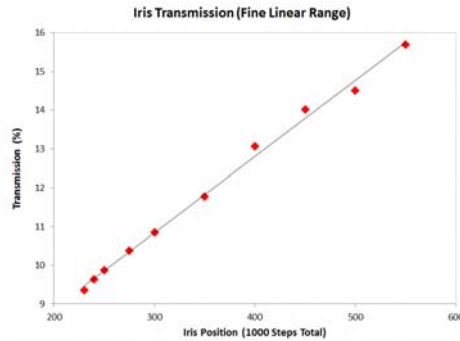
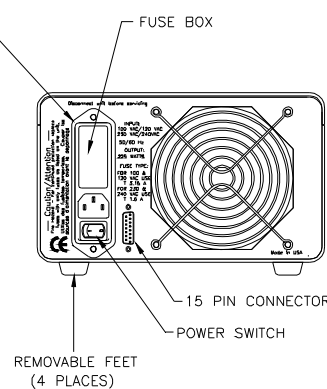
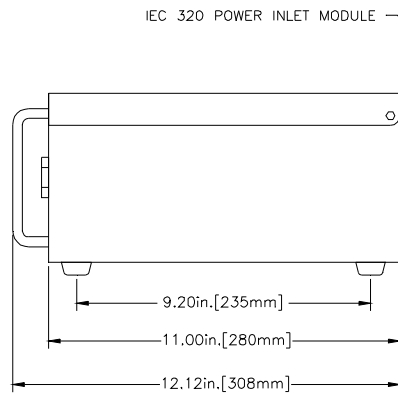
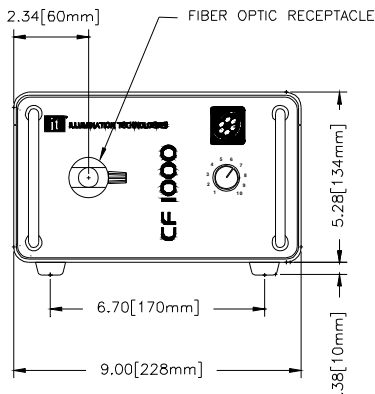
CONSTANT SPECTRUM OVER 3 LOG

A member of the **SmartLite™** family, the **CF1000-IRIS** combines an automated, computer-controlled iris wheel with the robust performance of our proprietary **LightLock™** light feedback system. This combination provides stable and consistent spectral output over a wide dynamic range (3.0 OD). The rotary iris is controlled by a stepper motor with 1000 precision, repeatable steps.

PRECISION IRIS DESIGN - The key to the success of the CF1000-IRIS design is the precise design and manufacture of the iris itself. Based on customer feedback, we have designed the unit to provide a high precision linear response over the top decade, and a logarithmic response over the bottom two decades (see graphs on reverse side). This allows the CF1000-IRIS to consistently and linearly deliver stable output of spectrally pure and temporally stable light from 100% to 0.05% of full scale over the lamp life.

ROBUST IRIS WHEEL - The iris wheel is precision manufactured from high grade stainless steel to ensure a lifetime of stability and repeatable performance. It is the only lightsource of its kind on the market today, and is capable of cycling to a new output setting in less than 1 second.

DETAIL DRAWING



TECHNICAL SPECIFICATIONS

Physical

Height: 5.68" (145mm)
 Width: 9.00" (230mm)
 Length: 12.13" (310mm)
 Weight: 9.8lbs (4.5kg)

Output Stability

Regulation: 0.1% (Photometric)
 Noise: 0.1% (Photometric)
 Long-term: 1.0% (Photometric)

Control

Manual: Front Panel Pot
 Analog: 0-5 VDC (Linear)
 Serial: RS-232(Ethernet Option)
 SS Relay: Analog & Serial
 Iris Wheel: RS-232

Electrical

Input: 95-240VAC
 50/60Hz
 Input Power: 290VA
 Inrush: 120V 3.6A
 Current: 240V 2.6A

Regulation Scheme

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

Environmental

Temperature: 0 to 40C
 Relative Humidity: 0 to 95%

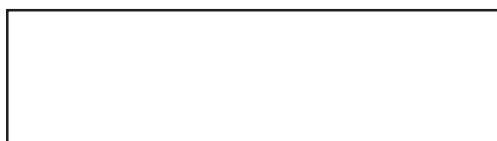
Diagnostics

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

Lamp

Visible: 9596-B
 High Color: 9596-HC
 Extended Range: 9596-ER
 NIR: 9596-IR

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