



Innovative Photonic Solutions

STS - D50

CMOS & CCD Sensor Testing System

KEY FEATURES

- CIE-D50 Illuminant Standard
- NIST Traceable Calibration
- 2% Uniformity (25mm FOV)
- 8-pos Filterwheel (W/R/G/B)
- Electromechanical Shutter
- Automated Ethernet Control
- Internal Self Diagnostics
- 150W Tungsten Halogen
- Light-Lock™ Light Feedback



Simple. One Button. NIST Traceable.

The STS-D50 is a perfectly tuned system designed to meet all of your CMOS and CCD sensor calibration and testing needs. Based on years of working with our customers on this demanding application, the STS-D50 has all of the features needed for production and research environments alike.

The system ensures that every one of your CMOS/CCD sensor calibration stations worldwide is operating to the same standard. The STS-D50 system combines the simple operating capabilities of the industry standard CF-2000, with the easy to use 4910 companion calibrator, ensuring exacting performance (even after numerous lamp replacements by untrained operators). Calibration only needs to be performed once per lamp, and takes less than 3 seconds to complete.

The STS-D50 features an internal 8-position filter wheel with precision interference color and ND filters for 3-channel linearity checks with a constant 5000°K color temperature. The unit also has sophisticated diagnostic technology to warn the operator when lamp performance or operating temperature is out of specification.

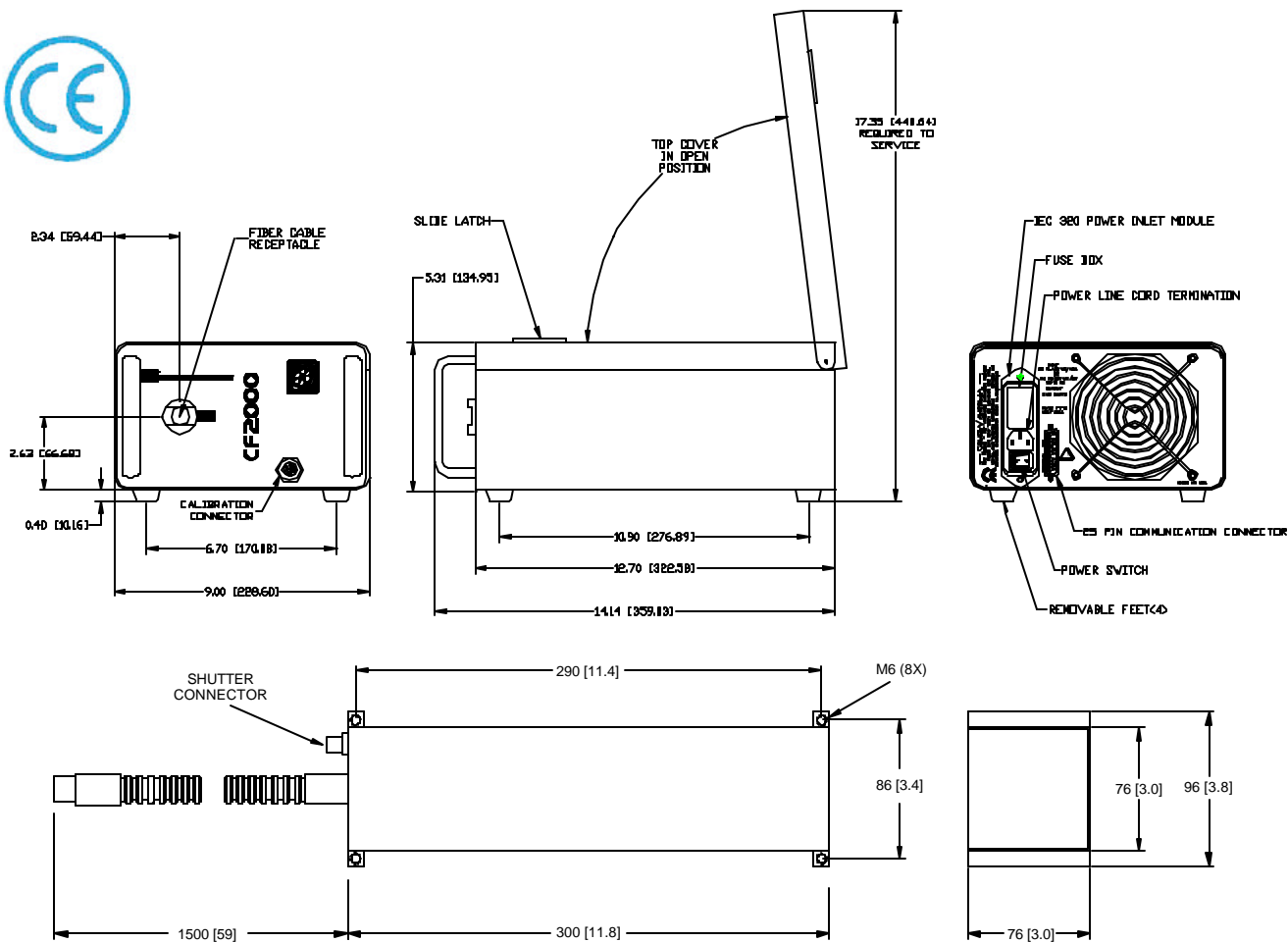
The fiberoptic integrating cavity provides excellent uniformity (2% over 25x25mm) and incorporates a precision electromechanical shutter. Filter selection and shutter operation are automatically controlled through the Ethernet interface.

The STS-D50 sensor testing system is NIST traceable and comes with a full one year warranty. OEM customization and private label solutions available - contact factory for details.

FILTER POSITIONS

- 100% White (5000°K)
- 40% White (5000°K)
- 100% Red (610 < λ < 690nm)
- 40% Red (610 < λ < 690nm)
- 100% Green (500 < λ < 590nm)
- 40% Green (500 < λ < 590nm)
- 100% Blue (400 < λ < 510nm)
- 40% Blue (400 < λ < 510nm)

Detail Drawing



Technical Specifications

Output

CIE-D50 NIST Traceable
 100 Lux 100% @ 5000°K

Control

Filter Wheel: Ethernet + Manual Jog
 Shutter: Ethernet

Electrical

100-240VAC 50/60Hz

Stability/Repeatability

Regulation: 0.1% (Photometric)
 Noise: 0.1% (Photometric)
 Long-term: 1.0% (Photometric)
 Lamp to Lamp: 4.0% (Radiometric)
 Unit to Unit: 5.0% (Radiometric)

Regulation Scheme

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

Diagnostics

Regulation: Yellow + Serial
 Lamp Out: Red + Serial
 Over Temp: Red + OFF

Environmental

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

Lamp

IT Part Number 9596A

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