

FTS100 SERIES EXTENDED AREA FUSED SOURCES

The **FTS100 Series** are the industry standard for extended area infrared and visible fused radiation sources with a maximum absolute temperature of 100°C and luminance output of 100cd/m². The fast slew rates, high stability, uniformity, and emissivity of the patented *FTS100 Series* sources make them the ideal choice for most fused, multispectral, or broadband IR and Vis imaging system testing requirements.

Fast slew rates and high stability are the result of EOI's over 40 years of blackbody/controller design experience. The temperature controller utilizes a proprietary adaptive control loop to provide fast setting times, zero set point drift and excellent temperature stability.

High Accuracy in the displayed temperature reading is assured with the use of extremely stable probes and high resolution, precision processing electronics.

Emitting surface sizes range from 2 x 2 inch (51 x 51 mm) to 24 x 24 inch (610 x 610 mm). Custom sizes are also available upon request.

Ethernet LAN and RS232 Serial Interfaces are included as standard equipment with the *FTS100 Series* controller allowing greater flexibility for integration into automated test systems. IEEE488 GPIB interface is optional.

A user-friendly menu system, accessed with a keypad on the front panel of the controller, allows for easy configuration and operation of the *FTS100 Series* system.



Calibration of an *FTS100 Series* source is a quick and easy automated procedure using one of EOI's Calibration Kits. The recommended calibration cycle for *the FTS100 Series* is six months and is traceable to the National Institute of Standards and Technology (NIST).



The *FTS100 Series* Sources are suitable for laboratory or field use:

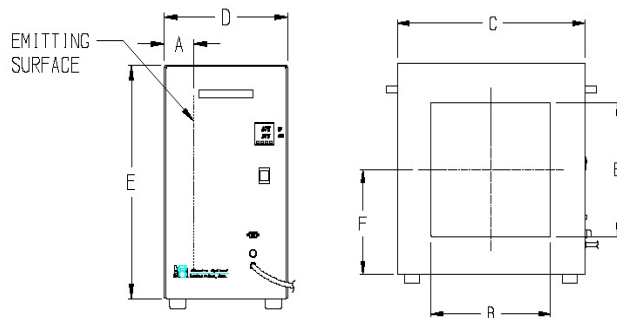
- ◆ **Fast Slew Rates**
- ◆ **High Stability and Accuracy**
- ◆ **Many Standard Sizes**
- ◆ **Two Computer Interfaces Standard**
- ◆ **2 Year Warranty**
- ◆ **Optional Temperature ranges from -60°C and +200°C**

FTS100 Series extended area sources are available in standalone configurations or integrated into any of EOI's Target Projectors, Simulators, and Automatic Test Stations.

Available Options

- ◆ MicroGroove Enhanced Emissivity - MG
- ◆ Liquid Cooled - CFC
- ◆ High Output Luminance - HL





Source Dimension in Inches (mm)

Model	Depth to Emitting Surface A	Emitting Surface B	Case Width C	Case Depth D	Case Height E	Optical Centerline F
FTS100-02	0.4 (10)	2.0 (51)	3.6 (91)	5.8 (147)	4.6 (117)	2.7 (69)
FTS 100-04	1.1 (28)	4.0 (102)	8.1 (206)	6.8 (173)	7.6 (193)	4.0 (102)
FTS 100-06	1.0 (25)	6.0 (152)	10.9 (277)	6.8 (173)	12.7 (323)	7.2 (183)
FTS 100-08	1.1 (28)	8.0 (203)	12.1 (307)	8.7 (221)	11.1 (282)	6.0 (152)
FTS 100-10	1.0 (25)	10.0 (254)	13.1 (333)	7.2 (183)	13.6 (345)	7.0 (178)
FTS 100-12	1.2 (31)	12.0 (305)	14.9 (378)	8.7 (221)	15.1 (384)	7.8 (198)
FTS 100-14	1.2 (31)	14.0 (356)	16.1 (409)	8.0 (203)	16.6 (422)	8.5 (216)
FTS 100-24	1.2 (31)	24.0 (610)	29.0 (737)	6.3 (160)	29.0 (737)	14.5 (368)

Specifications

Temperature Range	0°C to 100°C
Temperature Accuracy	±0.015°C (Includes Uncertainty)
Stability	±0.001°C
Uniformity	±0.01°C within ±5°C of ambient temperature ±0.3% thereafter
Slew Rate	0.1° C: 20 sec, 1.0°C: 40 sec, 10°C: 80 sec (Includes Settling Time to 0.01°C)
Emissivity	0.97 ± 0.02 (2µm to 20 µm), with MicroGroove 0.99 ± 0.004 (2 µm to 20 µm)
Luminance Range	0 to 100 cd/m ²
Setpoint & Display Resolution	0.0001°C
Cable length	8 feet standard, others available
Controller Size*	5.25" H x 19" W x 18" D (rack mount)
Line Voltage*	100-240 VAC ± 10%, 50/60Hz

* Larger Systems may require a 200-240VAC ± 10%, 50/60Hz power supply in addition to the controller.

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EOFTS100-022210DF (FTS100 Rev A)

Specifications subject to change without notice.