

SC 6000 SYSTEM CONTROLLER

Compact, flexible, out-of-the-box programmable radiometer/photometer



SC 6000 SHOWN WITH DETECTOR

COMPREHENSIVE

Labsphere's SC 6000 System Controller is a programmable radiometer/photometer that allows for up to 100 programmed calibrations. Labsphere will calibrate the SC 6000 to monitor luminous and radiant flux, luminance, radiance, intensity, illuminance and irradiance, making it an integral component of any calibration system.

Use the SC 6000 across a range of applications such as a uniquely designed imaging calibration instrument, a lamp measurement photometer, or a laser power measurement system.

FEATURES:

- Compatibility with Si, Ge, InGaAs, and many other photovoltaic detectors
- Dynamic Range of 8 Decades of Sensitivity
- Stores up to 100 Photometric and Radiometric Calibration Constants
- 32 Output Lines for Computer Control of System Peripherals
- TC/IP, DHCP Computer connections

BEST FOR:

- Controlling Calibration Systems
- Photometric and Radiometric Monitoring of Camera Calibration Systems
- Lamp Measurement
- Photometry
- Laser Power Measurement

FLEXIBLE DESIGN

The SC 6000 is both a highly flexible, programmable radiometer/photometer and a system controller. The integrated microprocessor-based controller is the communication hub for Labsphere's power supplies. With a variety of interchangeable detector assemblies, integrating spheres and components, light sources, and power supplies, you are able to create, upgrade, or expand a calibration system in minutes.

OUT-OF-THE-BOX SOPHISTICATION

The SC 6000 operates out-of-the-box. A 64-digit backlit LCD display allows you to view measurement results, select calibration factors, and set display features and remote communication parameters.

Operation features include up to 100 programmable optical radiation calibrations, manual and auto ranging, digital or analog display, digital filtering, 5-digit display, display zero, and display normalization display.



SC 6000

Specifications

Model and Description
SC 6000 System Control Radiometer/Photometer

Order Number
AS-02702-000

Properties and Performance

Current Dynamic Range	8+ decades; 1pA - 20mA
Display Resolution	5 digits
Maximum Reading Rate	5 readings/second
Input	Single Channel
Input Connector	BNC
Input Bias	± 14 VDC Selectable
Input Impedance	0 Ω Single ended
Compatible Detectors	Photovoltaic (Si, Ge, InGaAs)
ADC Resolution	16 bits
Nonlinearity	± 1 count
Temperature Coefficient	$\pm (0.02\%$ of reading + 0.5 counts) per $^{\circ}\text{C}$
Operating Environment	0 $^{\circ}$ to 50 $^{\circ}\text{C}$, 0% to 70% relative humidity at 35 $^{\circ}\text{C}$
Calibration	Digital factors are stored in the ROM memory
Calibration Factors	2 to 100 programmable coefficients
Power Requirements	12 VDC, 750 mADC maximum AC/DC Converter Provided 90 ~ 264 VAC, 47 ~ 63 Hz
Computer Interface	TCP/IP, DHCP
Weight	4.1 lbs (1.86kg)
Dimension W x D x H	1.75 x 8.25 x 10.5 in (4.4 x 20.9 x 26.4 cm)

Compatible Labsphere Detectors

SDA-050-U-RTA-CX	Silicon Detector Assembly	AS-02522-400
SDA-050-P-RTA-CX	Photopic Detector Assembly	AS-02522-401
IDA-050-RTA-CX	InGaAs Detector Assembly	AS-02522-402
IDA-EXT-050-RTA-CX	Extended InGaAs Detector Assembly	AS-02522-403
GDA-050-U-RTA-CX	Germanium Detector Assembly	AS-02522-404