

10 REASONS TO UPGRADE YOUR DISPLAY COLOR MEASUREMENT TOOL.

Introducing the SLS 9400FC-PLUS from UDT Instruments, a revolutionary hand held colorimeter that sets new standards in display measurement accuracy, portability and affordability.

1. Dual LCD/CRT Measurement Capability. No need to buy two expensive instruments when one portable provides superior accuracy and flexibility.

2. Lab-Grade Accuracy. Calibrated to NIST-traceable color standards. Rivals the performance of many lab-grade instruments that sell for thousands more.



Non-contact measurement of FPDs for maximum measurement accuracy.

3. Portable. Lightweight, hand held and battery operated. Ideal for production quality control or in the field. Operates continuously for over 7 hours on a single charge.

4. Contact and Non-Contact Measurement. Solves contact measurement issues associated with touch screen FPDs.

5. Affordable. Priced hundreds less than competing systems that measure only FPDs or CRTs.

6. Rich Graphical Interface. Features a large, easy to read, backlit, numerical and graphic LCD display. Provides a bar graph of RGB or xyY, u'v'Y and XYZ, as well as CCT and Delta E values.



Unprecedented portability and ease of use.

7. No Polarization Correction Required. Special light collection geometry eliminates polarization error from display.

8. Field Calibration. Easily recalibrate the instrument via the "Learn Mode". This allows users to create new calibration standards as required.

9. Custom Calibration. Custom calibrations are available for unique measurement requirements, further enhancing the accuracy of your applications.

10. Ideal Complement to Gamma Scientific's RadOMA DMS Spectroradiometer. Team the SLS 9400FC-PLUS with Gamma Scientific's industry-renowned RadOMA DMS Spectroradiometer for unbeatable laboratory measurements and quality control.



Gamma Scientific's RadOMA DMS lab-grade traceable spectroradiometer.

Get more information. Redefine your color measurement applications with the revolutionary SLS 9400FC-PLUS from UDT Instruments. Call for more information today at 800-637-2758. Or visit www.UDTInstruments.com

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SLS 9400FC-PLUS

Colorimeter SLS 9400FC-PLUS Specifications

Display:	128 x 128 Liquid Crystal Graphics	
Display Modes (Numeric and CIE Plot):	CIE 1931 x, y, Y, CCT, ΔE CIE 1931 Δx , Δy , Y, CCT, ΔE CIE 1976 u', v', Y, CCT, ΔE CIE 1976 $\Delta u'$, $\Delta v'$, Y, CCT, ΔE	
Display Modes (Numeric ONLY):	CIE 1931 X, Y, Z, CCT	
Display Modes (Analog Bar Graph):	RGB color balance with regard to the reference (white reference or stored measurement)	
Luminance Units:	cd/m ² , fl, nit	
Range x, y (u', v'):	0.0048 - 0.8338 (0.0159 to 0.6233)	
Range of Y (luminance):	0.01 - 7,100 cd/m ²	
Range CCT:	2,500 - 30,000 K	
Displayed Precision:		
Color (x, y, u', v')	4 Decimal places	
Color (XYZ)	2 Decimal places	
CCT	1 Kelvin	
Luminance	0.01	(Range 0.01 - 0.99 cd/m ²)
	0.1	(Range 1.0 - 99.9 cd/m ²)
	1	(Range 100 cd/m ² and above)
Accuracy:	D65	Full Range
(temperature: 23°C ±2°C, relative humidity: (40 ±10%) x, y, u' v': Luminance: RGB Bars:	±0.002 < 2% ±1 digit < 1%	±0.002 < 2% ±1 digit < 1%
Repeatability:	D65	Full Range
(temperature: 23°C ±2°C, relative humidity: (40 ±10%) x, y, u' v': Luminance: RGB Bars:	±0.001 ±0.5% ±1 digit < 1%	±0.001 ±0.5% ±1 digit < 1%
Polarization error (% of CIE 1931 xy and Luminance):	< 0.5%	
Luminance change with measurement distance (as compared to contact measurement):		
at 3" distance:	< 0.5%	
at 12" distance:	< 1%	
Selectable Range for internal data averaging: (Accessible via keypad / menu system)	1 to 16 (1, 2, 4, 8 and 16)	
Color Sensor Configuration:	Four Detectors matched to CIE 1931 Color Functions Typical f1' (%): X= 3.63 (combined accuracy of x1 and x2 detectors) Y= 1.99 Z= 3.42	
Acceptance angle of the Optical Detector Head (full angle):	9.5°	
Measurement Distance:	0.0" (in contact) to 12"	

System specifications may change without notice.

Sensing Area Size (diameter, mm/in.) vs. measurement distance (mm/in.):

Area Size (dia.)		Distance	
mm	in.	mm	in.
40	1.6	0	0
44	1.7	25	1
49	1.9	51	2
53	2.1	76	3
65	2.6	152	6
91	3.6	305	12

Update rates:

Screen:	> 2 times /sec.
RS-232 (Display Enabled):	> 2 times /sec.
RS-232 (Display Disabled):	> 3 times /sec.

Communication Rate via RS-232 Port: 9600 Baud

Memory Locations for storing data:

Custom Calibration matrixes (Color and Luminance):	5
Setups:	5
Measurements:	10
White References:	6 (pre-programmed with D65, 9300K, D50, 3200K)
Color Standards:	6 (pre-programmed with SMPTE-C, EBU, ITU REC.709, DCI-P3)

Internal Power Source (DC):

Rechargeable Battery Pack	Rechargeable Battery Pack
Recharge Time:	< 4 Hours
Battery Life (for new battery):	
Backlight Off:	~14 Hours
Backlight On:	~7 hours

External Power Supply (AC input):

Universal input Desktop Power Supply, TUV, CSA, UL Approved	Universal input Desktop Power Supply, TUV, CSA, UL Approved
Input Power Rating:	100-240V, 50-60 Hz, 75VA
Output Power Rating:	9V DC, 2.2A

Optical Detector Head Assembly:

Diameter of Rubber cup:	78mm (3.05")
Length:	218mm (8.57")
Diameter of the Optical Head Tube:	63.5mm (2.50")
Thread size in the mounting plate:	1/4" - 20 (for mounting on TRIPOD)
Weight:	680g (1.5 lb)
Cable Length (standard):	1.3m (5')
Cable Length (optional):	up to 3m (or 12')

Display Unit:

Height:	130mm (5.10")
Width:	100mm (3.90")
Length:	280mm (11.0")
Weight:	750g (1.65 lb)

Standard Calibrations:

Unit comes pre-programmed with calibration matrixes for CRT, FPD -CCFL, FPD-LED backlit monitors.

Custom calibrations can be performed upon request.

