

Reflectance Spectrophotometer

Spectro-3801



EPC / PRODUCTS / APPLICATION / SOFTWARE / ACCESSORIES / CONSUMABLES / SERVICES

Analytical Technologies Limited

An ISO 9001 Certified Company

www.analyticalgroup.net

Spectro-3801 is a high performance spectrophotometer with sideward test aperture. It could be widely used for printing, textile, plastic, food, medicine, automobile industries to meet customers' color measurement requirement.

►► INTRODUCTION

Instrument adopts geometric of D/8 which is highly recommend by CIE, integration of the full band LED composite light source, double beam optical system, ETC every-test calibration technology, spectral reflectance standard deviation within 0.08, maximum of chromaticity values ΔE^*_{ab} is 0.03.

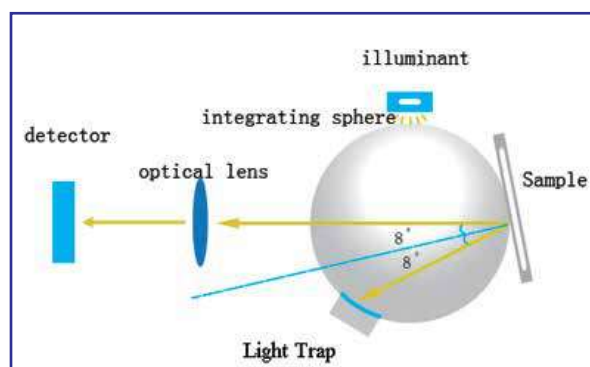
Brief Introduction

1. Its test caliber is in the sideward which is more convenient to fix the sample. Solid samples (plastic sheet, cloth) can be placed directly on the test aperture. Paste objects can be placed in a glass cell/cuvette, and then placed in the measurement port. It is very suitable for powder material measurement in case of material falling into the integrating sphere.



D\8 Structure

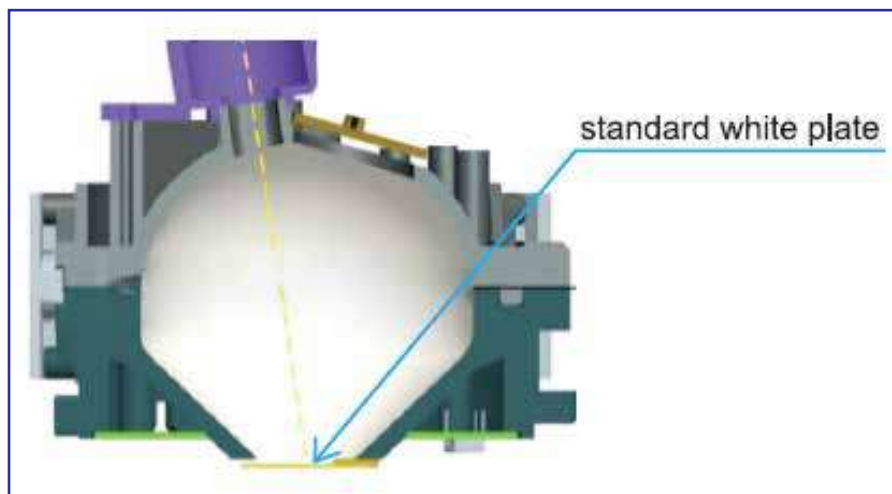
Our device adopts internationally agreed observe condition D/8 (Diffused illumination, 8 degrees observer) and SCI(specular component included)/SCE(specular component excluded).



Can Measure SCI and SCE at the same time

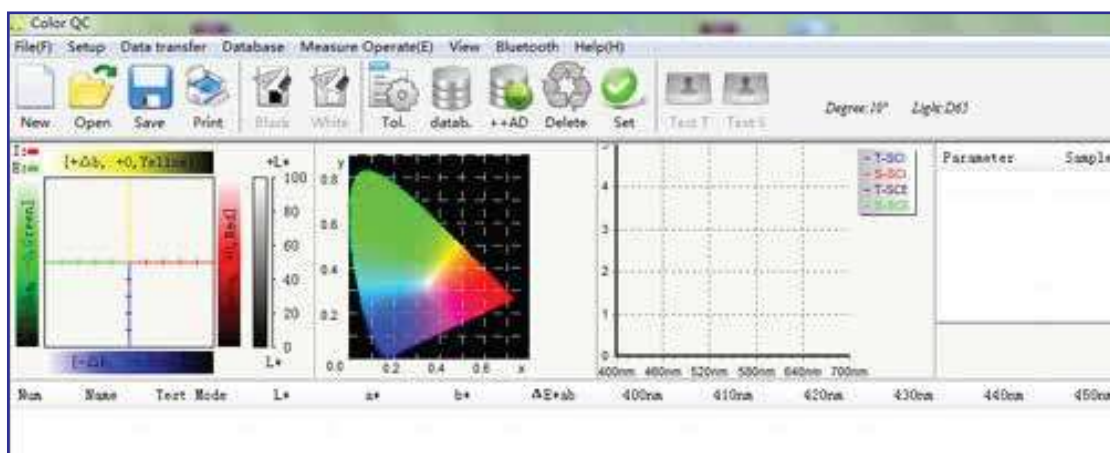


ETC Technology (Every Test Calibration)



Color QC Software

Our spectrophotometer comes with PC color QC software, which is applicable in various industries for management of color data. It is used for store test result, generate test report and print test report after connect with printer.



►► TECHNICAL DATA

Type	Spectro-3801
Geometry	d/8(Diffused lighting, 8 degrees observe angle)(conform to CIE 7No.15, ISO 7724/1, ASTM E1164, DIN 5033 Teil7, JIS Z8722 Condition c standards)
Size of integrating sphere	Φ40mm
Illumination Light source	CLEDs(entire wavelength balanced LED light source)
Sensor	dual light path sensor array
Wavelength range	400-700nm
Wavelength interval	10nm
Half spectral width	5nm
Reflectivity range	0-200%
Reflectivity resolution	0.01%
Observation angle	2°/10°
Measurement light source	A,C,D50,D55,D65,D75,F1,F2,F3,F4,F5,F6,F7,F8,F9,F10,F11, F12,DLF,TL83,TL84,NBF,U30,CWF
Data being displayed	sample's color values, reflectance, color difference values/graph, pass/fail results, color error tendency, color simulation, display measurement area, bhistory data color simulation, manual input standard sample, generate measurement report
Measurement time	About 1 second
Measurement time interval	0.5 second
Measuring caliber	Φ11mm
Color space	CIE-L*a*b,L*C*h,L*u*v, XYZ, Yxy, reflectance, Hunterlab, Munsell MI, CMYK,RGB,HSB
Color difference formulas	ΔE*ab,ΔE*CH,ΔE*uv,ΔE*cmc(2:1),ΔE*cmc(1:1),ΔE*94,ΔE*00, ΔEab(Hunter),555color classification
Other colorimetric indices	WI(ASTM E313-00,ASTM E313-73,CIE/ISO, AATCC, Hunter, Taube Berger Stensby), YI(ASTM D1925,ASTM E313-00, ASTM E313-73), Tint(ASTM E313,CIE,Ganz),metamerism index Milmm, adhesive/changing color fastness, ISO luminance,8 gloss, A density, T density, E density, M density

►► TECHNICAL DATA

Repeatability	Chromaticity values: $\Delta E^*_{ab} \leq 0.015$ (After calibration, standard deviation of 30 measurements on test white board, 5 second intervals), Maximum: 0.03
Battery capacity	rechargeable, 20000 continuous tests, 7.4V/6000mAh
Interface	USB
Data storage	40000 test results
Light source longevity	5 years, 1.5 million tests
Inter-instrument agreement	ΔE^*_{ab} within 0.2 (BCRA color charts II, average of the 12 charts)
Size	350*300*200mm(L*W*H)
Weight	4.5kg
Display	5 inches True color screen
Work temperature range	0~45°C, relative humidity 80% or below (at 35°C), no condensation
Storage temperature range	-25°C to 55°C, relative humidity 80% or below (at 35°C), no condensation
Standard accessories	AC power line, operating manual, color management software, drive software, electronic operating manual, color management guide, USB cable, black/white calibration tube, measurement and test report
Optional accessories	powder molding device, 40*10 cuvette
Color matching system	Matches
UV light source	without

►► APPLICATION

Fabric Color Measurement



Opaque Liquid Color Measurement



►► Servicing, Validation, Trainings and Preventive Maintenance :

Servicing	: We have team of service engineers who can attend to any make of instrument promptly @the most affordable cost.
Trainings	:We also take up preventive maintenance to reduce downtime of instrument's Trainings.
AMC's/CMC	: We offer user training both in-House and at customer sites on instrument principles, operations, troubleshooting.
Validations	: We have protocols for carrying out periodic Validations as per GLP/ GMP/USFDA norms.
Instruments	: We offer instruments/Renting Services Modules like pumps, detector etc. on Rent.



►► About Analytical Technologies

Analytical Technologies is synonymous for offering technologies for doing analysis and is the Fastest Growing Global Brand having presence in at least 96 countries across the globe. Analytical Technologies Limited is an ISO :9001 Certified Company engaged in Designing, Manufaturing, Marketing & providing Services for the Analytical, Chromatography, Spectroscopy, Bio Technology, Bio Medical, Clinical Diagnostics, Material Science & General Laboratory Instrumentation. Analytical Technologies, India has across the Country operations with at least 4 Regional Offices, 6 Branch Offices & Service Centers. Distributors & Channel partners worldwide.

►► Our Products & Technologies



UV/VIS
Spectro 2080+
Double Beam



Infra FTIR



Optima Gas
Chromatograph
3007



Optima Gas
Chromatograph
2979 Plus



Flash
Chromatograph



Atomic Absorption
Spectrophotometer



Liquid Partical
Counter



Optical Emission
Spectrophotometer



DSC/TGA



Semi Auto Bio
Chemistry Analyzer



HEMA 2062
Hematology
Analyzer



Micro Plate
Reader/Washer



URINOVA 2800
Urine Analyzer



Total Organic
Carbon 3800



Fully Automated
CLIA



NOVA-2100
Chemistry Analyzer



PCR/Gradient PCR/
RTPCR



TOC
Analyzer



Laser Particle
Size Analyzer



Ion Chromatograph



Water purification
system

►► Regulatory compliances



►► Corporate Social Responsibility

Analytical Foundation is a Nonprofit Organization (NGO) found for the purpose of:



Analytical Foundation

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2. Improving quality of life by offering YOGA Training courses, Work shops / Seminars etc.

3. ANALYTICAL FOUNDATION aims to DETOXYFY human minds, souls and body by means of Yoga, Meditation, Ayurveda, Health Care, Awards, Media, Events, Camps etc.

►► Reach us @



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