



Guangdong Threenh Technology Co., Ltd.

COFFEE COLORIMETER PS808C

Precise Detection, Master Roast Quality



Φ50mm extra-large measuring aperture



7-inch capacitive touch screen



Repeatability $\Delta E^*ab < 0.03$



PS808C Coffee Colorimeter is a desktop high-precision colorimeter specifically designed for coffee roasting quality control. It adopts a 45/0 optical geometry and a Φ50 mm large aperture, suitable for irregular granular samples such as coffee beans and coffee powder. Built-in professional indicators including SCAA, HCCI, and coffee roast degree, it enables one-stop accurate quantitative detection of coffee roast levels.

Own the core tech: Top performance, budget price.



ISO9001



Large aperture for coffee – stable even with uneven particles

Φ50mm food-grade large aperture — works for both beans and grounds, reducing errors caused by uneven particle distribution.

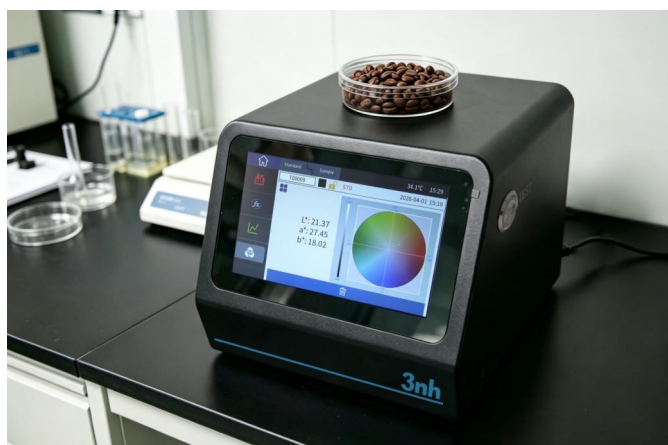
KEY FEATURES

1. Professional Coffee Indicators, Accurate Quantification of Roast Degree

Built-in dedicated indices such as SCAA, HCCI, coffee roast degree, and CIE LAB color space. Users can measure industry-standard indicators without switching devices.

SCAA STANDARD COLOR CHART

SCAA Number	Roast Name	Roast Name
25	Italian Roast	#36251E L: 16.5, a: 6.88, b: 7.4
35	French Roast	#3F2A21 L: 19.33, a: 8.99, b: 9.28
45	Full City Roast	#4D2F25 L: 22.7, a: 12.79, b: 11.7
55	City Roast	#583427 L: 25.66, a: 15.11, b: 14.39
65	High Roast	#583222 L: 25.02, a: 14.6, b: 16.67
75	Medium Roast	#623323 L: 27.04, a: 19.31, b: 19
85	Cinnamon Roast	#6F3625 L: 29.67, a: 23.89, b: 21.8
95	Light Roast	#7F3A23 L: 33.26, a: 28.37, b: 27.7



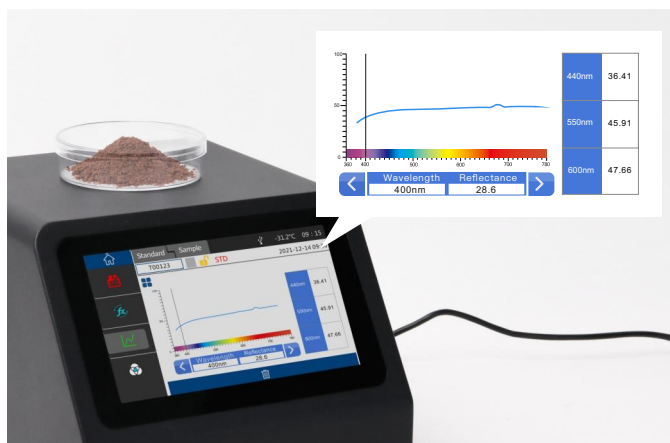
2. Extra-Large Measuring Aperture for Diverse Samples

Equipped with a food-grade Φ50 mm extra-large measuring aperture, it easily measures coffee beans, coffee powder and other samples, effectively reducing measurement fluctuations caused by uneven particle distribution, ensuring stable and reliable data.



3. Full-Band Spectral Presentation, No Detail Left Out

Precise acquisition in the 400–700 nm band with a wavelength interval of 10 nm. Real-time display of the professional spectral reflectance curve, making sample spectral characteristics clear at a glance.



4. Standard 45/0 Optical Structure, Enhanced Anti-Interference

Adopts 45° annular uniform illumination and 0° perpendicular receiving geometric optics, matching human vision and effectively avoiding interference from sample surface texture and gloss.

Coffee roast-dedicated colorimeter — precisely quantifies roast degree

Built-in SCAA/HCCI — industry indicators handled by one instrument.



5. Massive Data Storage, Worry-Free Traceability

Supports local storage of 1,000 standard samples and 30,000 test samples. Measurement records can be saved at any time, meeting the needs of large-scale production traceability and analysis.



6. Multi-Language and PC Software, Convenient Expansion

Supports multiple languages including Chinese, English, Russian, etc. Comes with professional quality management software, facilitating data analysis, report export and multi-scenario applications.



APPLICATION FIELDS

The coffee colorimeter adopts 45/0 optical geometry and is equipped with a $\Phi 50$ mm large aperture. It is used for coffee roast measurement, and can also be used for precise color measurement and quality control in industries such as plastics & electronics, paints & inks, textile & apparel dyeing, printing, and ceramics.



OPTIONAL ACCESSORIES

Product Name	Material Code	Image	Function
Mini Printer	1.609.01.0020		Portable, allowing you to print various measurement parameters without connecting to a computer.

TECHNICAL SPECIFICATIONS

Product Model	PS808C
Geometry	45/0 (45° annular uniform illumination, 0° reception)
Compliant Standards	CIE No.15, GB/T 3978, GB 2893, GB/T 18833, ISO 7724-1, ASTM E1164, DIN 5033 Teil 7
Features	The coffee colorimeter adopts 45/0 optical geometry and is equipped with a Φ50 mm large aperture. It is used for coffee roast measurement, and can also be used for precise color measurement and quality control in industries such as plastics & electronics, paints & inks, textile & apparel dyeing, printing, and ceramics.
Integrating sphere size	/
Light Source	Combined LED light source
Spectroscopy	Nano-integrated spectral device
Sensor	Silicon photodiode array (dual-row 20 sets)
Wavelength Range	400~700nm
Wavelength Interval	10nm
Half Bandwidth	10nm
Reflectance Range	0—200%
Measurement Aperture	Φ50
Color Space	CIE LAB
Color Difference Formulas	ΔE*ab
Other chromaticity index	SCAA, HCCI, coffee roast degree
Observer Angle	10°
Illuminant	D65
Display	Spectral graph/data, sample colorimetric values, color difference values/graph, pass/fail results, color deviation
Measuring Time	Approx. 1.0 s
Repeatability	Spectral reflectance: standard deviation ≤0.07% (≤0.2% for 400—700 nm) Colorimetric values: ΔE*ab ≤0.03 (after warm-up and calibration, 30 measurements of white plate at 5 s intervals)
Inter-Instrument Agreement	ΔE*ab ≤0.35 (average of measurements on 12 BCRA Series II color tiles)
Measurement Modes	Single measurement, average measurement (2—99 times)
Dimensions	210 × 245 × 188 mm
Weight	3.1 kg
Power Supply	24 V DC, 3 A power adapter
Light Source Lifespan	10 years or >2 million measurements
Display	TFT true color 7-inch capacitive touchscreen
Interfaces	USB, Bluetooth
Data Storage	1,000 standard samples, 30,000 test samples
Languages	Simplified Chinese, English, Traditional Chinese, Russian
Operating Temperature Range	0—40°C, 0—85% RH (non-condensing), altitude below 2000 m
Storage Temperature Range	—20 to 50°C, 0—85% RH (non-condensing)
Standard Accessories	Power adapter, data cable, user manual, quality management software (Download URL: http://www.3nh.com/en/client_en_14.html), white plate, Petri dishes x2
Optional Accessories	Micro printer

GUANGDONG THREENH TECHNOLOGY CO., LTD.



Spectrophotometers



Colorimeters



Haze Meters



Gloss Meters



Test Charts



Light Booths

★ CONTACT US



web: www.3nh.com



Email: 3nh@3nh.com



Tel: 0086-020-82880288



Add: 6-8th floors, Building B33, Low Carbon Headquarters Park,
Xincheng Road No.400, Zengcheng District, Guangzhou,
Guangdong Province, China