

COMPANY PROFILE

Guangdong Threenh Technology Co., Ltd. is a high-tech enterprise formed through the strategic integration of 3nh (Threenh), TILO, Sine Image, and SINESPEC. The company is mainly engaged in the field of Color Measurement, integrating R&D, production, and sales. Our product portfolio includes Spectrophotometer, Colorimeter, Gloss Meter, Haze Meter, Transmittance Meter, Standard Light Booth, Image Test System, and Color Matching Software. Backed by expert pre-sales and after-sales support, our solutions are trusted in 80+ countries and regions, widely applied in Coatings, Plastics, Textiles, Printing, Food, Cosmetics, and other related industries.



CERTIFICATE OF HONOR

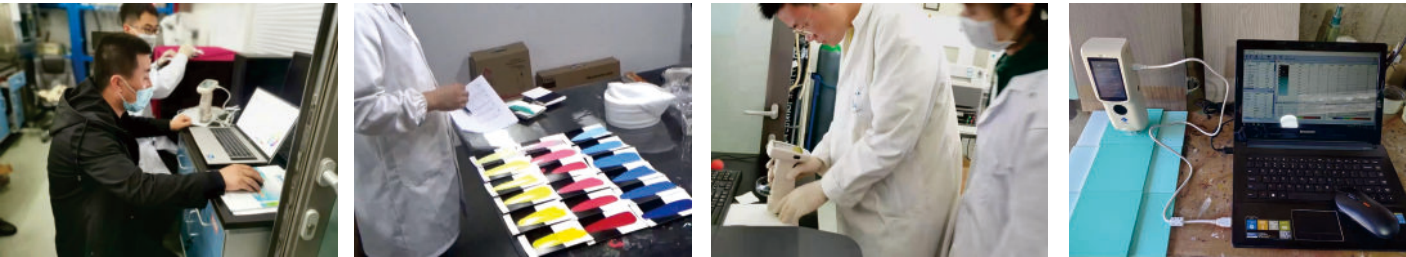
- Chinese National high-tech enterprise
- Passed ISO9001 quality management system certification
- Obtained FCC, CE, RoHS and other certifications
- Obtained the authorized agent of PHILIPS products
- Obtained German TÜV quality manufacturer certification



CERTIFICATE OF HONOR

Color difference ΔE^*ab	Meaning
0 - 0.5 ΔE	A normal invisible difference
0.5 - 1.0 ΔE	Very small difference, only obvious to a trained eye
1.0 - 2.0 ΔE	Medium difference, also obvious to an untrained eye
2.0 - 4.0 ΔE	An obvious difference
4.0 ΔE	A very obvious difference

Since its establishment, 3nh has built strong relationships with manufacturers both in China and abroad. With extensive applications across the industry, we have successfully helped numerous domestic and international clients solve color-related challenges—such as color difference and color matching difficulties—through our outstanding service and product quality. Our solutions have earned wide recognition and satisfaction from customers around the world.



SPECIAL OBJECT MEASUREMENT

With the help of the instrument's multifunctional test components, we can efficiently measure special samples

Measure powdery objects

When measuring powdered objects with a spectrophotometer, the measured value will vary depending on the powder density and surface conditions. In order to avoid large deviations, some special methods can be used. For example, a certain amount of powder can be taken and placed in a container of a certain shape and size (such as a cuvette) while keeping the surface characteristics unchanged. If the object to be measured is large, a spectrophotometer with a large measuring aperture can be used. In this way, the measured surface can be more even and the repeatability of the data can be guaranteed.

Measure translucent objects

When measuring translucent objects, it must be taken into account that light may penetrate the object and the measurement may be affected by the material behind the object. To solve this problem, the object can be thickened before measurement to prevent the light from completely penetrating. Another method is to place an opaque white plate behind the object.

Measure patterned samples

If you use a small-caliber spectrophotometer to measure objects with patterns or textures, the measured value will vary with the measurement position. In this case, you should use the largest possible caliber or repeat the measurement multiple times at different positions and then calculate the average value.

COOPERATIVE CLIE



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Follow the official WeChat account for more information.



GUANGDONG THREEHN TECHNOLOGY CO., LTD.



THREENH PRODUCT CATALOG

FOCUSED FOR MORE THAN TWENTY YEARS ,MASTER CORE TECHNOLOGY

Trusted for color in 80+ countries, 3nh makes color management borderless.

FOCUSING ON THE OVERALL COLOR SOLUTION

A spectrophotometer +PeColor,Make color matching so easy!

PeColor color matching software is a color modulation software designed with a job-oriented approach. It is suitable for color matching solutions in coatings, plastics, paints, inks, and textiles, and can provide rapid and accurate color analysis and formulas for various applications. PeColor features easy operation and learning, accurate color matching, and strong correction capabilities. It can not only be used for color matching in laboratories but also for quality control and color difference correction in workshop production.



- Newbies become masters in no time, with 2 days of training and 3 days of practice—just 5 days away from mastering the skill.

- Quick one-click color matching with multiple options available, completing 30 days' worth of work in just 1 hour.

- Intelligent formula correction, automatic calculation of corrected formulas, and smart integration with third-party systems and devices.

- High color-matching efficiency with the software, significantly saving on labor, materials, and time costs.

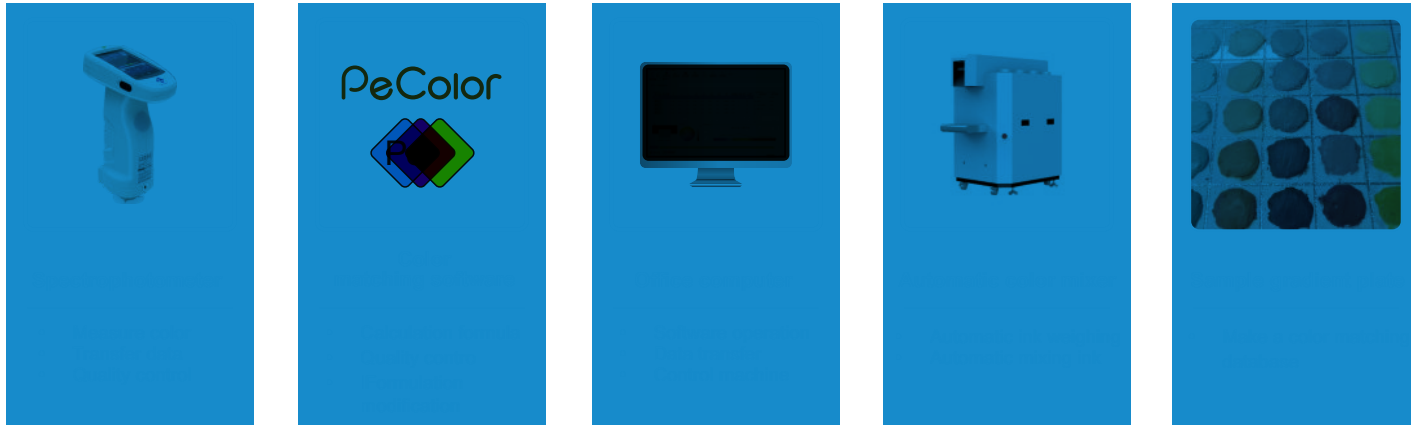
APPLICATION FIELDS

PeColor professional computer color matching software, including color matching, formula correction archive and quality control functions, is used for color matching software for printing, painting, coating, ink, textile, ceramic tile and automobile, providing perfect color matching solutions.



PREPARATION BEFORE COLOR MATCHING

The color matching system requires the following tools, PeColor supports a variety of 3nh models of color difference meters, see the previous page.



CERTIFICATE OF HONOR

Benchtop Spectrophotometer (TS8500/TS8510/TS8520/TS8560)



- Reflection: D/8, Transmission: D/0, Haze (ASTM D1003)
- Repeatability: $\Delta E^*ab \leq 0.01$, Inter-instrument agreement $\Delta E^*ab < 0.1$
- Full spectrum LED light source + xenon lamp light source
- 41 light sources, 19 Colorimetric Indices
- Automatic temperature and humidity compensation function
- Enables measurements from the side, top, or bottom (with optional accessories), adaptable to various positioning setups.



- Reflection: D/8, Transmission: D/0, Haze (ASTM D1003)
- 360~780nm measurement wavelength
- Repeatability: Reflection $\Delta E^*ab < 0.01$, transmittance $\Delta E^*ab < 0.02$, Inter-instrument agreement $\Delta E^*ab < 0.12$
- 14 Colorimetric Indices, 24 light sources
- Temperature monitoring and compensation, built-in temperature sensor
- PC software has powerful expansion functions

Portable Spectrophotometer(CR7/8/9)



- D/8 (diffuse illumination, 8° direction reception)
- Analysis of dual optical path system
- Combined full spectrum LED light source + UV light source
- 18 light sources, 9 color spaces, 9 chromaticity indicators
- Repeatability: $\Delta E^*ab < 0.03$, difference between units $\Delta E^*ab < 0.15$
- Simultaneous SCI/SCE and fluorescent sample measurement
- Camera locating position and stabilizer cross measurement position
- PC software has powerful expansion functions



- Built-in color card system: directly obtain the corresponding color code after measurement, making color card code matching effortless.
- Equipped with dual measurement apertures (4mm/8mm) to meet the measurement needs of different samples.
- Camera viewfinder positioning allows clear observation of the measured area.
- Adopts the internationally recognized D/8 SCI/SCE synthetic technology.
- Can be connected to mobile apps and PC software for extended functionality.



- Up to 12 measuring angles
- Maximum repeatability $\Delta E^*ab < 0.04$
- Measurement of scintillation, color scintillation and granularity effects
- 18 light sources, 6 color spaces
- Color repeatability $\Delta E^*ab < 0.02$
- Measurement of metallic colors, pearlescent colors and other complex special effect colors
- Built-in color camera for viewfinder positioning, enabling clear observation of the measured area



- 45/0 geometric optical structure, 20mm large measuring aperture
- 18 light sources, 7 color spaces
- Repeatability: $\Delta E^*ab < 0.04$, difference between units $\Delta E^*ab < 0.04$
- Accurately measure reflectance data of samples/fluorescent samples
- Contains GB 2893, GB/T 18833 standard colors
- PC software has powerful function expansion
- Measurement of luminance factor and chromaticity coordinates of traffic signs, road markings, and retroreflective films



- D/8 optical geometry, compliant with CIE No.15 and GB/T 3978 standards
- Maximum repeatability: $\Delta E^*ab < 0.04$
- Supports national metrology calibration
- Supports 9 color spaces and 12 colorimetric indices
- One-click generation of seam color matching formulas with multiple formulation options
- Suitable for common epoxy grout, pigment, and powder-based materials
- Compatible with Android, iOS, Windows, WeChat mini programs, and HarmonyOS Color Matching Cloud platform



- Ensure first-class metrological qualification
- Unlimited sample thickness: Using only the test probe allows for more flexible and convenient measurement of samples of different sizes and shapes.
- Rapid measurement: Capable of measuring over 1 million samples per day.
- Key applications include precise color measurement and quality control in automated production lines.
- Equipped with multiple digital interfaces such as USB, RS485, RS232, Ethernet, etc., enabling convenient connection to external devices like computers, printers, and PLCs.



- Made of composite engineering plastic; molded production ensures over 10 years of durability — no yellowing, no deformation, no paint peeling
- Seamless design: 100% light-sealed, no leakage or transparency, eliminating ambient light interference
- Automatic switching between light sources; equipped with metamerism function
- No preheating, no flicker, no vibration ensures fast and reliable color evaluation



- High color rendering index, with a light source timer for the lamp tube.
- Made of all - metal material, with substantial materials used, large opening size, and easy to operate.
- Provides standard light sources commonly used in the printing industry, meeting the requirements of ISO 3664:2009 industry lighting standards.
- Applicable to offset printing, flexographic printing, gravure printing and other printing factories, and can directly view reflective manuscripts.



- D/0 optical geometry
- Complies with pharmacopoeia color measurement standards; supports micro-volume transmission tests
- Intelligent zero calibration
- 15 color indices, 41 types of light sources (partial LED implementation)
- Repeatability (transmittance) within 0.05%, color difference value within 0.01, Inter-instrument agreement within 0.2
- Wavelength range: 360~780nm
- Capable of color analysis and transmittance testing



- 45/0 geometric optical structure
- Enables non-contact, high-precision color measurement for liquids, sauces, and powders
- Repeatability $\Delta E^*ab < 0.03$, Inter-instrument agreement $\Delta E^*ab < 0.2$
- Motorized vertical movement, automatically adjusts height for accurate measurement based on sample position
- Precise color measurement for automated production lines
- Multiple measurement modes (sample, quality control, continuous statistics mode) are available



- Double standard ISO & ASTM
- Open measurement area for vertical and horizontal testing to accommodate more samples under test
- Provides powerful software for measuring and analyzing haze
- 24 light sources, 8 chromaticity indices
- Can easily implement ASTM D1003 non-compensated method, ISO 13468 compensated method for total light transmittance, haze testing, and clarity testing.



- 45/0 geometric optical structure
- Enables non-contact, high-precision color measurement for liquids, sauces, and powders
- Repeatability $\Delta E^*ab < 0.03$, Inter-instrument agreement $\Delta E^*ab < 0.2$
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- Precise color measurement for automated production lines
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- 45/0 geometric optical structure
- 18 light sources, 4 chromaticity indicators
- Repeatability density value: $< 0.01D$
- Chromaticity value $\Delta E^*ab < 0.04$, inter-unit difference $< \Delta E^*ab 0.18$
- Realize T, E, A, I density measurement(ISO)
- The PC software has powerful functional expansion
- Provide professional printing quality standards



- Equipped with four light sources: ultraviolet, visible light, 940nm infrared, 1400nm infrared, full infrared band, SHGC, and TSER.
- Rapid measurement: Measurement time is only approximately 0.5 seconds.
- Used for measuring parameters such as transmittance and shading coefficient of transparent materials like glass and films.
- Resolution up to 0.10%, measurement accuracy better than $\pm 1.5\%$.
- Automatic calibration on startup. One - key measurement.



- Measuring angle: 20°/60°/85°
- Measuring spots: 2*4
- Complies with the JJG 696 requirements for working Gloss Meters
- Repeatability: 0~100GU: 0.2GU; 100~1000GU: 0.2 %GU
- TFT true color 3.5 inch display
- Equipped with GQC6 quality management software
- Basic, Statistical, Continuous, and Quality Control Measurements (PC Software Only)



- Measuring range: 45°: 0~800GU; 75°: 0~150GU
- Equipped with two measuring angles (45° and 75°), supporting both single-angle measurement and dual-angle measurement.
- Meets the requirements for working glossmeters specified in JJG 696.
- Supports switching between basic mode, statistical mode, continuous mode, and quality control mode.
- Features the function of automatic inspection and calibration of standard plates / manual calibration.
- Measuring spot: 45°: 10x13; 75°: 4x6



- Supply a variety of high-quality test cards to meet the different needs of customers
- Complete supporting facilities
- Customized test card delivery time: 1-3 days
- Transmission and reflection can be customized
- Can provide complete optical imaging high-definition testing solutions
- Widely used in mobile phone cameras, cameras, camcorders, projectors, scanners, security monitoring, automotive imaging and other industries.



- ransmission surface uniformity > 90%
- Equipped with 4 standard color temperatures; other color temperatures can be customized
- Adjustable brightness with a dimming range of 0-120,000 Lux
- Stable color temperature, flicker-free, and lifespan over 10,000 hours
- There are high and low illumination dimming modes. The low illumination dimming mode has two dimming knobs, coarse and fine, which makes the dimming more precise.