



北京凯普海泰科技有限公司
Beijing Cap High Technology Co.,Ltd.

www.capitalinstrument.com

NH300 High-Quality Portable Colorimeter



High-End Brand of Domestic Colorimeter

NH300 is a mainstream brand colorimeter introduced by Captech which has synthesized the advantages of ten more traditional imported colorimeters and has experienced ten thousands tests and applied many innovative technologies. Accurate, Stable, Exquisite and Affordable!

The Preferred Solution for Color Quality Control Management

NH300 high-quality portable colorimeter has adopted multi-channel color sensors of international brands, more stable IC platform as well as efficient and accurate algorithms to provide users with accurate and fast color management and application. NH300 is also designed with ergonomics and humanized operation and it has applied for a number of patents. NH300 is a multifunctional colorimeter with high quality and competitive price. Captech insists on independent research whose technology innovation is unique in color management field. NH300 is the most convenient colorimeter for users.

1. Leading Humanity Design and Convenient Operation

- Auto White and Black Calibration at Startup
- Structure Design in line with Ergonomics
- Fool-style Operation Interface

2. Stable Measurement Performance

- The average fluctuation of ΔE is less than 0.08, actually more in 0.03~0.06.
- Portable structure design which is more conducive to keeping the instrument stable when using.

3. Convenient and Fast Locating

- Illumination locating is a fast, simple and convenient locating function which is the original function by Captech.

4. PC Software—Realize More Function Expansion

- Captech has the intellectual property of PC software. The corresponding software serial number and password protection are configured in Captech colorimeter.
- Be able to perform color difference analysis, color difference cumulative analysis, chromaticity index, color sample database management, simulating object color, etc.

5. Advanced Power Management Design

- Captech is the first enterprise using high capacity Li-ion battery in colorimeter.
- Captech Li-ion battery can be repeatedly charged which will save cost. Meanwhile, it can measure more than 3000 times on one charge to ensure the stability of long time measurement.



	NH300	NH310
Illuminating/Viewing Geometry	8/d	8/d
Measuring Aperture	Φ8mm	Φ8mm/Φ4mm
Detector	Silicon photoelectric diode	Silicon photoelectric diode
Color Space	CIEL*a*b*C*h* CIEL*a*b*	CIEL*a*b*C*h* CIEL*a*b* CIEXYZ CIERGB CIEL*u*v* CIEL*C*h Yellowness & Whiteness Color Fastness
Color Difference Formula	ΔE^*_{ab} $\Delta L^*_{a^*b^*}$ $\Delta E^*_{C^*h^*}$	ΔE^*_{ab} $\Delta L^*_{a^*b^*}$ $\Delta E^*_{C^*h^*}$ ΔE_{CIE94} ΔE_{hunter}
Light Source	D65	D65 D50 A
Light Source Device	LED blue light excitation	LED blue light excitation
Errors Between Each Equipment	$\leq 0.40\Delta E^*_{ab}$	$\leq 0.40\Delta E^*_{ab}$
Storage	100pcs standards 8000pcs samples	100pcs standards 8000pcs samples
Repeatability	Standard deviation within ΔE^*_{ab} 0.07 Average of 30 measurements of standard white plate	Standard deviation within ΔE^*_{ab} 0.06 Average of 30 measurements of standard white plate
Weight	500g	500g
Dimension	205×70×100 mm	205×70×100 mm

Power source	Rechargeable lithium-ion battery 3.7V@3200mAh	Rechargeable lithium-ion battery 3.7V@3200mAh
Lamp Life	5 years, more than 1.6 million measurements	5 years, more than 1.6 million measurements
Charging Time	8 hours--100% electricity	8 hours--100% electricity
Measurement Times Before Recharging	3000 times in 8 hours	3000 times in 8 hours
Operating Temperature/Humidity Range	-10~40°C, relative humidity 0~85% with no condensation	-10~40°C, relative humidity 0~85% with no condensation
Data Interface	USB	USB
Extended Aperture (optional)	-	Φ8mm extended aperture, available for measuring concave surface
Printer (optional)	Miniature thermal printer	Miniature thermal printer

No.	Name	Type	Qty	Status
1	NH300 Colorimeter	Standard Accessories	1	√
2	White Calibration Cover	Standard Accessories	1	√
3	8mm Measuring Aperture	Standard Accessories	1	√
4	Power Adapter	Standard Accessories	1	√
5	Li-ion Battery	Standard Accessories	1	√
6	USB Cable	Standard Accessories	1	√
7	Operating Instruction	Standard Accessories	1	√
8	Software CD	Standard Accessories	1	√

9	Product Certification and Warranty Card	Standard Accessories	1	√
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Optional Accessories:

10	Miniature Thermal Printer	Optional Accessories	1	---
11	Powder Test Box	Optional Accessories	1	---
12	Extended Aperture (8mm)	Optional Accessories	1	---