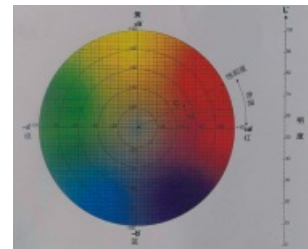
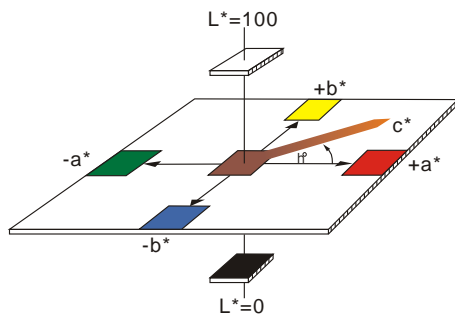


The human eye is capable of differentiating several million colors, despite this subjective visual evaluation, when used for quality control purpose, is no longer preferred as it suffers from a lack of real quantifiable data and inconsistent documentation. Since the early 1930's many scientific measuring techniques have been developed by National Standard Organisations, among them the CIE (International Committee of Light), based on a logical numeric scaling where physical parameters and calculations have been clearly defined, universally accepted and adopted. As a result, many methods are today perfectly proven, and governed by major standard such as ASTM, BS, DIN, or ISO etc.

Colorimeters use the mathematically defined light sources and observers described above to measure colors under precisely defined measuring geometries and output the requested data to their display, printer or computer.



## Economic Portable Colorimeter

**B** GD 551 Economic Portable Colorimeters offer a simple and fast measurement for color difference between two samples. It's a highest cost performance colorimeter and very suitable for QC inspection of production and construction site.

- ◆ Double Locating: Illuminating locating and cross locating
- ◆ Double Measurement End Face: Large area measurement and small area measurement
- ◆ New Integrating Sphere Design: More stable measurement
- ◆ Equipped with Rechargeable High-Capacity Li-ion Battery

### Feature and Advantages

- ◆ Built-in white plate parameters. No need to calibrate each time which realize rapid measurement.
- ◆ Double Locating: Illuminating locating and precise cross locating.
- ◆ Switchable Double Measurement End Face: Large stable end face and small concave-convex end face.
- ◆ New Integrating Sphere Optical Path Design: Eliminating the stray light of main optical path and auxiliary optical path. Possessing the highest measurement stability and precision.
- ◆ 4mm Measuring Aperture.
- ◆ Equipped with rechargeable high-capacity Li-ion battery. No need to purchase battery repeatedly.
- ◆ Configure CQCS3 software. Connect PC computer to realize more functions.
- ◆ Having got SCM Metrological Certification, CE Certification, and ISO9001 Quality Management System Certification.
- ◆ Hand-head structure: small and convenient; make the measurement easier.
- ◆ Spending huge sums on high-end mold. Product consistency approaches 100%.
- ◆ High cost performance: large output, good quality, cheap products.



Illuminating Locating



Cross Locating,  
Large Stable End Face



Small Concave-Convex End Face

### Technical Parameters

|                               |  |
|-------------------------------|--|
| Illuminating/Viewing Geometry | 8/d  |
| Measuring Aperture            | Φ4mm   |
| Detector                      | Silicon photoelectric diode  |
| Locating                      | Illuminating Locating/Cross Locating   |
| Measurement End Face          | Large stable end-face and small concave-convex end-face  |
| Color Space                   | CIEL*a*b*C*h* ; CIEL*a*b* ; CIEXYZ   |
| Color Difference Formula      | $\Delta E^*a\ b\ \Delta L^*a^*b^*\ \Delta E^*C^*h^*$   |
| Light Source                  | D65  |
| Light Source Device           | LED blue light excitation  |
| Errors Between Each Equipment | $\leq 0.80\ \Delta E^*a\ b$  |
| Storage                       | 100pcs standards; 20,000pcs samples  |
| Repeatability                 | Standard deviation within $\Delta E^*a\ b\ 0.08$<br>( Average of 30 measurements of standard white plate ) |
| Language                      | English/Chinese  |
| Weight                        | 500g   |
| Dimension                     | 205mm × 67mm × 80mm  |
| Power source                  | Rechargeable lithium-ion battery 3.7V@3200mAh  |
| Lamp Life                     | 3 years, more than 1.6 million measurements  |
| Charging Time                 | 8 hours---100% electricity   |
| PC Software                   | CQCS3 Software   |
| Optional Accessories          | BGD 1390--- Special test box for powder<br>BGD 1393--- Mini Printer  |

◆ **Ordering Information:** BGD 551--- Economic Portable Colorimeter