UV-VIS-NIR Spectrophotometer UH4150
Automatic Measurement System

We have taken three popular peripheral systems for the UH4150 spectrophotometer—the automatic variable-angle absolute reflectance measurement system, the automatic polarization measurement systems, and 5 Degrees reflectance/transmittance measurement system with automatic X-Y stage—and converted them into standalone systems that can be purchased individually. By allowing measurements to be automated, these systems improve the reproducibility of measured values and reduce the time required to make measurements.

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| Automatic Polarization Measurement System   | ![Automatic Polarization Measurement System](image) | - The automatic polarization attachment is equipped with an internal polarization-removing plate, allowing measurements that do not incorporate the optical properties of the instrument.  
- With automated detection in steps as small as 0.01° in the cross nicol state—in which transmissivity is minimized—it is possible to achieve highly reproducible results.  
- Available computations include: coloration (X, Y, Z), L*, a*, b*, L, a, b, L*, u*, v*, color coordinates x and y, and polarization. |
| Automatic Variable-angle Absolute Reflectance Measurement System | ![Automatic Variable-angle Absolute Reflectance Measurement System](image) | - The automated variable-angle attachment makes continuous automated measurements of transmission and reflection spectra under conditions that may be configured arbitrarily (polarizer, incident angle, acceptance angle).  
- Automatically measures absolute normal reflectance (5–60°).  
- The working time require per sample may be reduced as much as 96%.  
- 5–70° (5° steps), wavelength 300–800 nm, while measuring reflectance spectra; total of 28 measurements (including both S and P polarization) |
| 5 Degrees Reflectance/Transmittance Measurement System with Automatic X-Y Stage | ![5 Degrees Reflectance/Transmittance Measurement System with Automatic X-Y Stage](image) | - Includes a 5° reflectance/transmittance measurement system with an automatic X-Y stage; automatically measures relative reflectance spectra at 5° incident angle and transmission spectra at 0° incident angle.  
- Desired measurement points may be specified in advance to yield continuous measurement of specified points.  
- Time required for sample mounting and related tasks may be significantly reduced.  
- For a measurement consisting of 25 points, the operational setup time required (not including actual measurement time) may be reduced by 92%. |

Figure: 5° reflectance/transmittance measurement system with automatic X-Y stage and sample placement images