

**NEW**

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# MINI-DIFF V2

## For 2D/3D scattered light measurements

### Preliminary datasheet

*Mini-Diff V2 is the latest version of our bestselling Mini-Diff instrument.*

#### Some of the innovations in the Mini-Diff V2:

- Measurements of BSDF in red, green, and blue (RGB)
- TIS measurements for RGB
- Dynamic range has been increased from  $10^4$  to  $10^5$
- Colorimetric data: Lab or u'v'

#### BSDF Measurement Breakdown:

BRDF is measured for 4 angles of incidence (AOI):  $0^\circ$ ,  $20^\circ$ ,  $40^\circ$  and  $60^\circ$ .

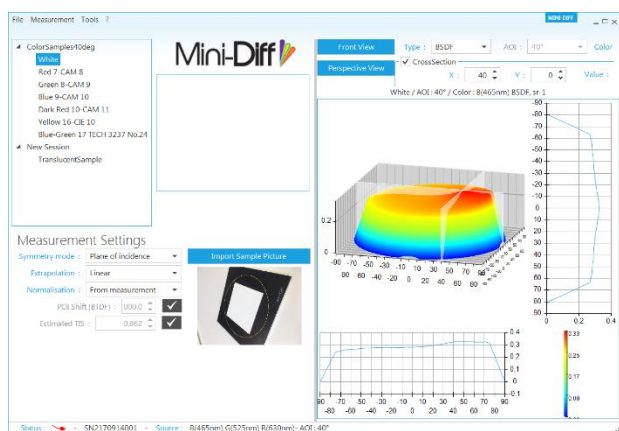
BTDF transmissive module now measures 4 AOIs in BRDF.

The improvement that we are most excited about is the **stability** that we have built-in to the Mini-Diff V2. Your calibration **will last longer**, making it **easier** for you to take your measurements.

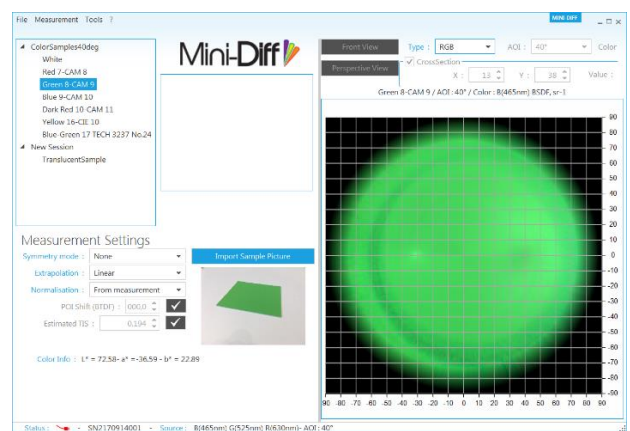
#### Software:

We have upgraded our software to provide a more intuitive interface, and we've added new software functions like a colorimetric viewing space and a sectional view for your 3D models.

#### Screenshots:

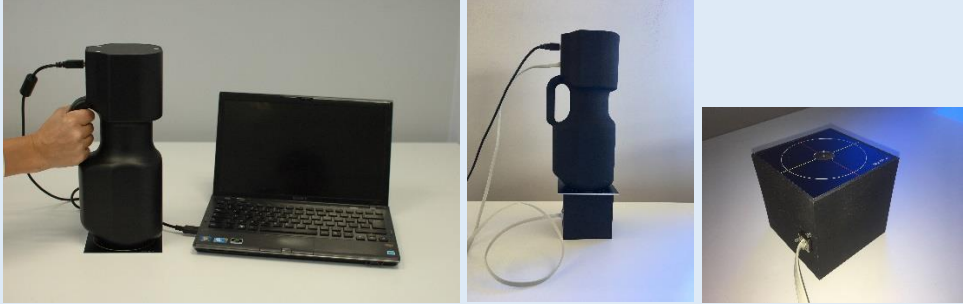


3D view



Colorimetric view

## Mini-Diff V2: Preliminary Datasheet

<b>Description</b>	<p>Handheld device for characterizing surface scattering (BSDF) and surface color.</p> 
<b>Light Sources</b>	<p>3 color collimated sources: Red, Green and Blue for RGB measurements.</p> <ul style="list-style-type: none"> <li>• Red: 630nm [<math>\Delta\lambda_{1/2}=25\text{nm}</math>]</li> <li>• Green: 525nm [<math>\Delta\lambda_{1/2}=35\text{nm}</math>]</li> <li>• Blue: 465nm [<math>\Delta\lambda_{1/2}=25\text{nm}</math>]</li> </ul>
<b>Angle of Incidence</b>	<ul style="list-style-type: none"> <li>• For reflection measurements: 0°, 20°, 40° and 60°</li> <li>• [Optional] For transmission measurements: 0°, 20°, 40° and 60°</li> </ul>
<b>Dynamic Range</b>	$10^5$
<b>BSDF Accuracy</b>	< 5% (For Lambertian sample)
<b>BSDF Repeatability</b>	< 2% (For Lambertian sample)
<b>Color Accuracy</b>	$D_{uv} < 0.1$
<b>Angular Aperture</b>	-75° to +75° - Hemispherical measurement
<b>Effective Measured Area</b>	$\Phi 1 \text{ mm}$
<b>Angular Resolution</b>	1°
<b>Output Data</b>	3D BSDF, 3D Angular Resolved Scatter (ARS)
<b>Exportation File Format</b>	Exportation to optical simulation software (list available upon request)
<b>Package</b>	<ul style="list-style-type: none"> <li>• Mini-Diff V2 measurement device</li> <li>• Standard reference materials (white and black)</li> <li>• Measurement and post processing software + factory calibration</li> <li>• USB cable</li> <li>• Storage box</li> <li>• User manual</li> <li>• [Optional]: BTDF module + Standard BTDF Reference + RJ11 Cable</li> </ul>
<b>Dimensions</b>	<ul style="list-style-type: none"> <li>• Storage box: 355*130*441 mm</li> <li>• Mini-Diff V2 device: 100*100*300 mm</li> <li>• [Optional] BTDF Module: 100*100*100 mm</li> </ul>
<b>Weight</b>	<ul style="list-style-type: none"> <li>• Mini-Diff V2 device: 2 kg</li> <li>• [Optional] BTDF Module: 0,5 kg</li> </ul>