Spectra-UT Ultra Tunable Spectral Calibration Sources

Spectra-UT delivers unprecedented spectral matching resolution.

Using a continuous-spectrum light source and polychromator technology Spectra-UT offers incomparable control over generated spectral waveforms.

Spectra-UT can reproduce complex spectral features with a precision that enables high-resolution simulation of standard illuminants as well as natural or synthetic sources and emissions. Spectra-UT is a uniform source for flat-fielding applications and can be adapted to optical light guides and collimators for remote sample spectral illumination.

Spectra-UT is capable of producing a near-perfect match to almost any target spectral waveform in the visible-light region by using a sophisticated spectral matching algorithm. It can render narrow-band targets on the order of 10 nm full-width half-max, broad VIS spectra and complex shapes.

Features
• Controllable variable light output levels
• Fast switching and settling time
• Digital performance feedback
• User-friendly software interface

Benefits
• Unmatched programmable high resolution spectral outputs
• Unlimited spectral reproduction over the visible range
• Accurately simulated OLED, MicroLED and LED displays
• Simulate RGB and broadband backlighting
• Reproduce indoor lighting conditions
• Spectrally pure, avoid channel cross talk in multicoloring imaging
• Traceable calibrations with integrated QTH calibration lamp and spectrometer

Applications
• Calibrate colorimeters and spectrophotometers
• Correct for tristimulus color mismatch errors
• Compare and differentiate instrument performance
• Test filtered and unfiltered optical sensor response
• Optimize display color reproduction
Specifications

Max Output Power in Visible Range: 1000 cd/m²
Light Control Levels: 25 cd/m² to 1000 cd/m²
Luminance Port: 36 mm diameter with protective window
Luminance Uniformity: 99%
Spectral Range: 390 nm – 780 nm
FWHM: 12 nm ± 2 nm
Peak Wavelength Separation: 0.4 nm
Spectral Monitor Accuracy: < 0.5 nm
Settling Time: < 1.0 sec
Spectral Monitor Scan Rate: < 1.0 spectra/sec
Source: Continuous wave
Triggering: Software
Communication: USB 3.0 or TCP
Operating System: Windows 10 with LabVIEW Runtime
Voltage Input: 12 V, 300 W through 110/220 VAC converter
Source Dimensions: 15 cm H 36 cm W 24 cm D
Weight: 7 kg (plus separate source power supply)

Specifications subject to change.

Ordering Information

<table>
<thead>
<tr>
<th>Model Number</th>
<th>Order Number</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>UT-1000-D</td>
<td>AA-01581-000</td>
<td>Down looking with luminance port on top</td>
</tr>
<tr>
<td>UT-1000-S</td>
<td>AA-01581-100</td>
<td>Side looking with luminance port on side</td>
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</tbody>
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