

# SPECTROMETER SPEKTRI 80

## PORTABLE DEVICE FOR MEASURING

- ✓ Illuminance, color temperature CCT, color coordinates (x,y) (u'v')
- ✓ Spectral power distribution and wavelength
- ✓ Photosynthetically active radiation density
- ✓ Flicker parameters



# SPEKTRI 80 - SPECIFICATION

<b>DEVICE CODE</b>	<b>SSL S-80</b>									
<b>Application area</b>	Spectroradiometer for measuring photometric, colorimetric and spectral parameters in the field and laboratory.									
<b>Measurement scope</b>	Light Ev	Color evaluation	Flicker	Spectral radiation	PAR					
<b>Parameters</b>	<ul style="list-style-type: none"> <li>- Illuminance Ev [lx],</li> <li>- Correlated color temperature CCT [K],</li> <li>- CIE Chromaticity coordinates (x,y)</li> <li>- CIE 1931, (u,v) CIE 1964, (u',v') CIE 1976</li> </ul> 	<ul style="list-style-type: none"> <li>- Color rendering index CRI: Ra, R1 to R14</li> <li>- TM-30-18: Rf, Rg, color vector graphic,</li> <li>- Standard deviation color matching SDCM</li> </ul> 	<ul style="list-style-type: none"> <li>- Percent flicker (%)</li> <li>- Flicker Index</li> <li>- Flicker Frequency</li> <li>- Flicker risk</li> <li>IEEE1789</li> </ul> 	<ul style="list-style-type: none"> <li>- Spectral irradiance [W/nm/m²]</li> <li>- Irradiance [mW/cm²]</li> <li>- Effective wavelength <math>\lambda_{eff}</math> [nm]</li> <li>- Peak wavelength <math>\lambda_p</math> [nm]</li> </ul> 	unit: [mmol/m²/s] <ul style="list-style-type: none"> <li>- PPFD 400-700nm</li> <li>- PFD-B 400-500nm</li> <li>- PFD-G 500-600nm</li> <li>- PFD-R 600-700nm</li> <li>- PFD-UV 380-400nm</li> <li>- PFD-FR 700-780nm</li> </ul> 					
<b>Calibration</b>	Factory calibration traceable to MIKES									
<b>Meter Class</b>	Directional response conforms to DIN 5032 Part 7 Class B									
<b>MODELS</b>										
<b>Product code</b>	<b>Product Name</b>	<b>Ev</b>	<b>Flicker</b>	<b>CCT</b>	<b>SDCM</b>	<b>CRI / TM30</b>	<b>Ee / WL</b>	<b>PAR</b>	<b>Other</b>	
S-80.Ee	SPEKTRI 80, Irradiance	✓					✓			
S-80.PAR	SPEKTRI 80, PAR	✓		✓				✓		
S-80.ColorLux	SPEKTRI 80, ColorLux	✓	✓	✓	✓	✓				
S-80.PRO	SPEKTRI 80, Prof	✓	✓	✓	✓	✓	✓	✓	EXE software	
<b>SPECTRAL SENSOR</b>										
<b>Measurement range</b>	5 – 100 000 lx			<b>Wavelength (WL) range</b>			320 – 780 nm			
<b>Sensor</b>	CMOS diode array			<b>Signal to noise</b>			1000 : 1			
<b>Optical Bandwidth</b>	9 – 11nm			<b>Integration time</b>			10 – 30 000 ms			
<b>WL resolution</b>	1 nm			<b>Digital resolution</b>			16 bits			
<b>Accuracy</b>	Illuminance 3%, CCT 3%, CRI, Ra 2%, WL 1nm									
<b>FLICKER SENSOR</b> (only S-80.Colorlux and S-80.PRO)										
<b>Digital Resolution</b>	12 bits			<b>Sampling rate</b>			200 000 samples/s			
<b>Illuminance range</b>	100-200 000 lx			<b>Frequency range</b>			0 – 10 kHz			
<b>OTHER</b>										
<b>Data readout</b>	Android app through Bluetooth, PC software through USB 2.0 (type B USB)									
<b>Dimensions</b>	118mm x 78mm x 42mm									
<b>Weight</b>	230 g									