

StellarNet App-note: Dual-DSR (Dual-Detector Super Range) Spectrometer Instrumentation for 0.2-2.3um Wavelength Ranges

➤ Dual-Detector instruments for super range

- Two instruments work as one updating spectral graph
- UV-VIS detector array plus NIR-InGaAs arrays
- 2048 element UV-VIS plus 512 and 1024 element NIR
- Ranges for 200-1700nm, 280-1700nm, 200-2300nm
- Ruggedized for field or lab process measurements
- Miniature USB-Hub provides instrument PC interface
- Applications for Spectroradiometry, food and pharmaceutical QA/QC, and chemical process measurements

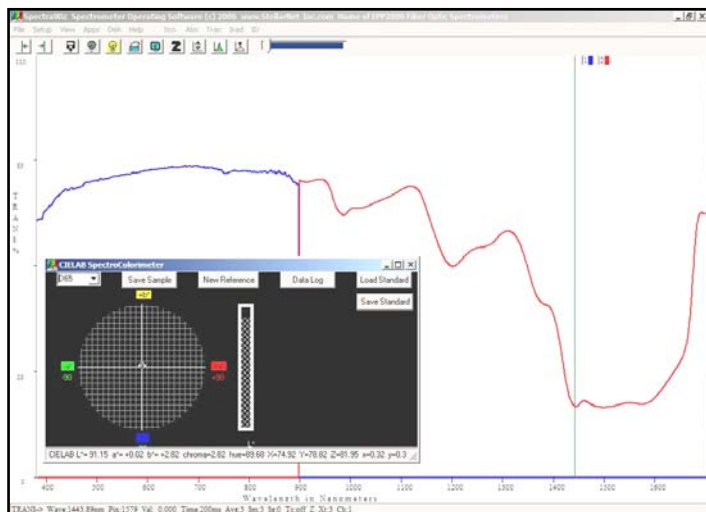


➤ Spectroradiometric Calibrations

- **Optional IRRAD-CAL** turns system into a **SpectroRadiometer** covering 200-1700nm
- **Variety of accessories** – reflectance probe/stand, transmission fixtures, and cuvettes for absorbance.

➤ Sample Color and Composition

- Measure sample CIELAB color and quantitative composition simultaneously
- Fast, easy results with little to no sample prep using reflectance fixture.



Dual-DSR reflectance spectrum of white sugar showing color and CH composition using TXF1 reflectance fixture for 280-1700nm

Item	Dual-DSR Instrument Descriptions	
DSR-CXR-512	Concave grating (UV-VIS, CCD) plus NIR-512 (InGaAs PDA) for 280-1700nm	
DSR-UVN-512	UVN-SR (UV-VIS-NIR, CCD) plus NIR-512 (InGaAs PDA) for 200-1700nm	
DSR-UVN-1024	UVN-SR (UV-VIS-NIR, CCD) plus NIR-1024 (InGaAs PDA) for 200-1700nm	
	DSR instruments listed below cannot be spectroradiometrically calibrated	
DSR-CXR-512 X	Concave grating (UV-VIS, CCD) plus NIR X -512 (InGaAs PDA) for 280-2300nm	
DSR-UVN-512 X	UVN-SR (UV-VIS-NIR, CCD) plus NIR X -512 (InGaAs PDA) for 200-2300nm	
DSR-UVN-1024 X	UVN-SR (UV-VIS-NIR, CCD) plus NIR X -1024 (InGaAs PDA) for 200-2300nm	