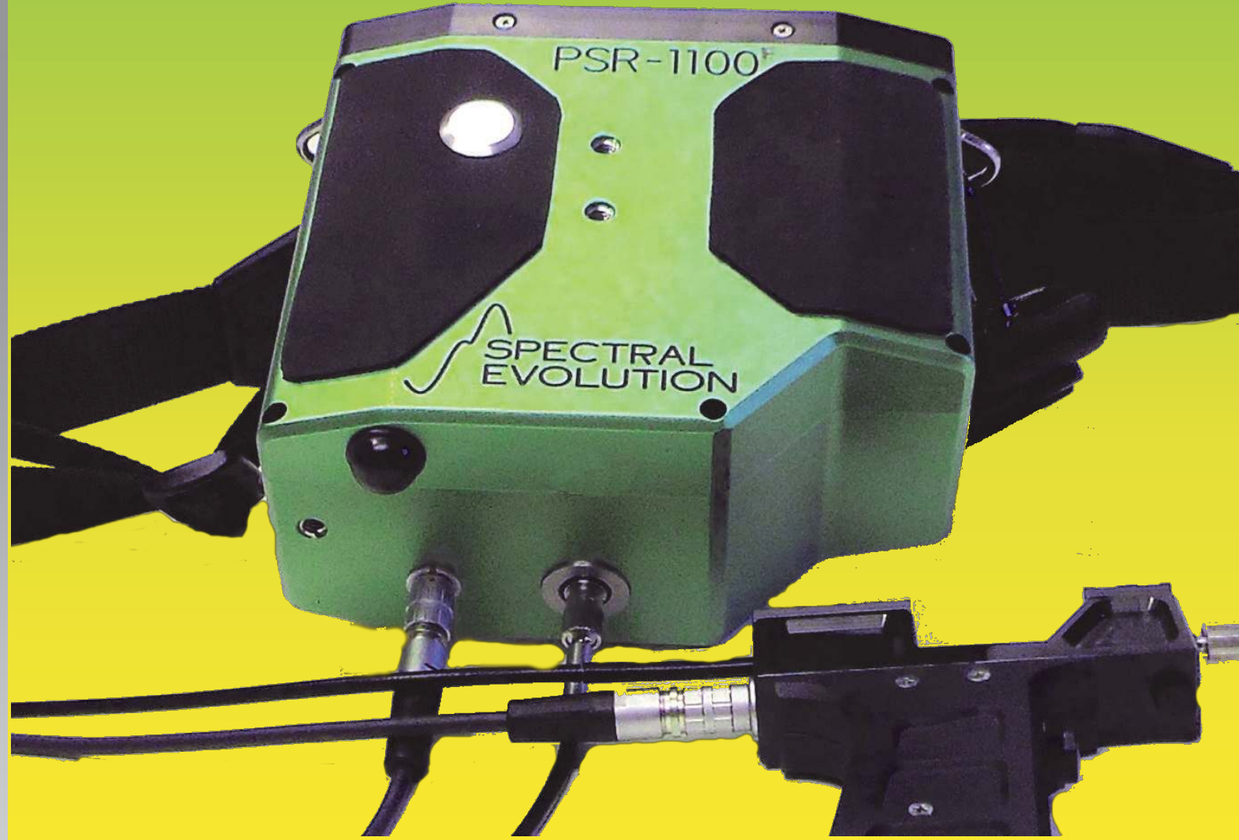
PSR-1100^f SPECIFICATIONS

Model:	PSR-1100^f
Optics (order separately)	Removable fiber optic cable with FC-mount. Special lengths and submersible fibers available
Optional optics choices	1, 2, 3, 4, 5 , 8 and 10 degree field of view fiber mount lenses, irradiance diffusers, contact probes, leaf clips, integrating spheres and more
Spectral Range	320-1100nm
Spectral Resolution	3.0nm @ 600nm
Sampling Bandwidth	1.5nm
Spectrometer type	Tall 512 element Si photodiode array with 25µ x 2.5mm pixel dimension; fixed grating
Calibration	Factory calibrated for radiance and/or irradiance (depending upon optics choices) using NIST traceable sources
Slit	50µm
A/D Converter	16 bit
λ Reproducibility	0.1nm
λ Accuracy	0.5nm
Integration Time	8-2000ms
Internal Battery	2800mAH Li-Ion snap-in battery with AC charger; runs for >4 hours on a full charge
Shutter for dark scans	Yes
Targeting	No
Internal Memory	2500 scans in stand-alone mode
Automatic Exposure	Yes
Interface	USB and Wireless Class 1 Bluetooth (100 meter range)
Dimensions	7.0" x 3.0" x 6.5" (17.78cm x 7.62cm x16.51cm)
Weight	less than 4 pounds (1.81 kg)
Mounting	Tripod mount (¼ x 20 mounting thread)
Software	DARWin SP Data Acquisition Package (Windows compatible)

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Haverhill, MA 01835 USA
Tel: 978 687-1833 ◊ Fax: 978 945-0372
Email: sales@spectralevolution.com
www.spectralevolution.com

Our Smallest, Lightest, Full-Featured Field Portable Spectroradiometer The PSR-1100^f



Small, Lightweight, Full Featured

The PSR-1100ᶠ Spectroradiometer Is Well Suited for a Range of Remote Sensing Applications:

- *Vegetation Studies*
- *Soil Analysis*
- *Crop Health*
- *Agricultural Research*
- *Plant Science*
- *Biomass Research*
- *Leaf Chlorophyll Content*
- *Water Body Studies*
- *Climate Studies*
- *Environmental Research*
- *Nitrogen Level Measurements*
- *Forest Canopy Studies*
- *Ecological Research*
- *Ice and Glacier Research*

SPECTRAL EVOLUTION offers a lightweight, handheld spectroradiometer to meet the rigorous demands of the Remote Sensing community. The PSR-1100ᶠ features a durable, detachable fiber optic cable with a wide array of optional fiber mount FOV lenses and irradiance diffusers. Whatever your measurement needs, SPECTRAL EVOLUTION offers an appropriate solution.

PSR-1100ᶠ offers

- 320-1100nm spectral range
- Rugged anodized aluminum construction for field reliability
- Keypad and LCD display—can collect and store 2500 spectra without a computer
- Auto-exposure and auto-dark shutter for easy, one-touch operation
- Snap-in lithium-ion rechargeable battery for more than four hours of continuous use
- Tag spectra with GPS, and photos with optional ALGIZ 8X rugged handheld tablet running Windows 10
- High reliability with all photodiode arrays for stable calibration
- Wireless Bluetooth interface for cable-free data connection
- Lightweight, less than four pounds
- Exclusive DARWin SP Data Acquisition software charts radiance, irradiance, reflectance, absorbance, or transmittance
- All data is automatically saved as an ASCII file for immediate use with 3rd party software

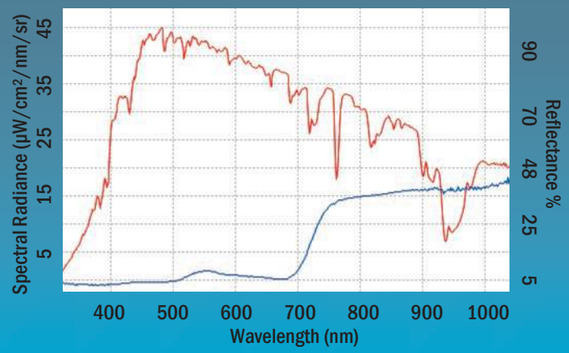


PSR-1100ᶠ has a built-in LCD screen and keypad and can store up-to 2500 scans.



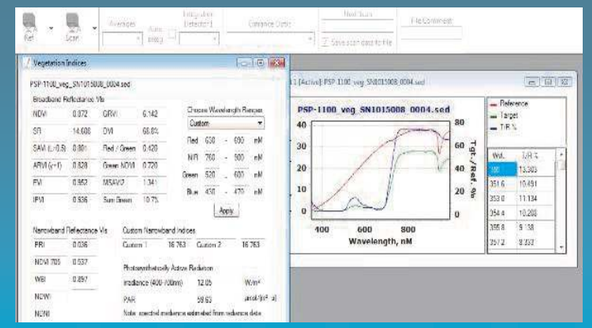
The PSR-1100ᶠ can be ordered with a range of accessories for field and laboratory use, including:

- *Leaf clip—specifically designed for leaf reflectance measurements with a built-in white plate, small spot, and low power illumination. Perform measurements on a very small leaf area without damaging the sample.*
- *Tungsten halogen contact probe—easy-to-use with a built-in light source, it is well-suited for vegetation reflectance studies in the field.*
- *FOV lenses—with a 25° FOV fiber optic cable with an industry standard FC connector, the PSR-1100ᶠ can be equipped with 1, 2, 3, 4, 5, , 8 and 10° FOV lenses to meet your application requirements*
- *ALGIZ 8X rugged handheld tablet—with a sunlight readable display for viewing spectra, the ability to store an almost limitless number of scans, and the capability of tagging scans with images from its digital camera, and GPS coordinates—ALGIZ 8X is the perfect complement to the PSR-1100ᶠ in the field.*



Reflectance of grass field

Reflectance of grass field section was measured using the PSR-1100ᶠ Spectroradiometer with a 4° field of view lens. The graphs were generated with DARWin SP Data Acquisition and Analysis software included with each PSR-1100ᶠ. Red trace represents a control solar scan as measured from a reflectance panel. The reflectance scan of green grass is shown in blue. DARWin SP allows users to plot multiple scans on the same graph for easy comparison using DARWin's built-in analysis features. Data is output in ASCII format and can be exported to many 3rd party programs for further analysis.



Analyze spectra using 19 Vegetation Indices

DARWin SP Data Acquisition software provides pull-down menu access to more than 19 vegetation indices, including NDVI, SR, SAVI, ARVI, EVI, IPVI, PRI, WBI, PAR, and more. In addition, since DARWin SP saves your spectra as ASCII files, they can be used with other third party application software, without requiring pre-processing.