SPECTRAL EVOLUTION

Identifying and Mapping Invasive Plant Species

The ability to scan plants in the field and quickly identify them is an essential part of controlling the spread of invasive plant species. A PSR+ field spectroradiometer provides the rugged portability and high resolution/high sensitivity needed to successfully identify and map the presence and distribution of invasive plants.

The PSR+ can be equipped with Spectral Evolution's unique leaf clip for field plant sampling. The leaf clip includes a built-in white reference standard and the ILM-105 light source which is rail mounted to the PSR+. The light source is kept away from the leaf clip so that the heat doesn't affect or damage your sample in any way. The result is consistent lighting for your scans in the field that is not dependent on ambient light.

The PSR+ is available with a range of Field of View (FOV) lenses and pistol grip, as well as direct attach lenses for stand-off plant and canopy measurements.

The PSR+ uses three photodiode array sensors to cover the 350-2500nm spectral range UV/VIS/NIR). This solid state design means there are no moving optical parts to breakdown or become misaligned. The lightweight PSR+ can be used in the field with the leaf clip, shoulder strap, and the GETAC microcomputer for voice notes, digital pictures, and GPS. The data is attached to your scans in an ASCII file for easy output to a spreadsheet or import into another program like ENVI. The PSR+ also has an LCD display for capturing scans in the field without the GETAC. On-board memory can store up to 1000 scans for download later.

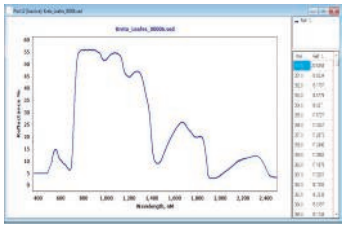
Optional EZ-ID sample identification software allows you to take scans and create your own library of spectra for different plant species. You can select the metadata you want to capture with each scan, such as operator name, location, date, sample name and description, and more, In addition you can create up to eight custom metadata fields for the library. With EZ-ID you can quickly build your own library of invasive species for immature and mature plant samples and compare new scans with this library for fast identification. This will help you identify and control the spread of invasive species to new areas and identify the introduction of new species. In addition you can scan native plants to check their growth and health in response to the invasion and other factors.

The PSR+ can be used in a range of applications, including:

- Ground truthing satellite data
- Estimation of plant chlorophyll
- Environmental research
- Crop and plant health studies
- Soil analysis
- Canopy studies

The PSR+ is lightweight and portable for in situ measurements and plant identification.

Unique leaf clip protects your sample from heat and damage during scanning.



Optional EZ-ID helps you create a custom library of scans.

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