

## NUMIS Lite Data Sheet



*NUMIS Lite system. Image Courtesy of Iris Instruments.*

The MRS is the only non-invasive method by which directly studies groundwater reservoirs from surface measurements. Other types of measurements, e.g. electrical resistivity and time or frequency domain EM can infer the presence of water by measuring the changes in the electrical properties of soils and rocks, but their results can be ambiguous and confused by the presence of electrically conductive materials such as clays and clayey shales which have electrical properties similar to those of fresh water.

In the MRS, a pulse of current at a given frequency is transmitted into a large surface loop. The signal produced in return by protons, contained within water molecules is measured within the same loop.