



SOIL MOISTURE MONITORING

WHAT'S YOUR SOIL CONTENT WATER PROFILE?

"THE METASPHERE UNITS WORK VERY WELL, ALLOWING CRUCIAL FLOW DATA TO BE RETRIEVED TO SATISFY REGULATORY COMPLIANCE FOR WATER COMPANIES AND ENVIRONMENT AGENCIES THROUGHOUT THE UK"

Soil moisture is the quantity of water contained in a specific soil. It is used in many scientific and technical areas including hydrology, agriculture, flood monitoring and drought monitoring.

Metasphere's systems measure volumetric water content and the soil water content profile, with up to ten discrete sensors connected to a single system.



THE PROBLEM

In agriculture, knowing when to irrigate and by how much can have a significant impact on yield, as well as the costs involved with sourcing water and the nutrients that can be needlessly washed away by over-watering.



THE RISK

Over-irrigating can result in waterlogged soil, degrading crops, while underwatering can cause crop failure. More land is needed for agriculture as population increases, meaning more efficient use of water is essential.



THE SOLUTION

The ideal soil moisture systems use different types of soil moisture probes, which can give soil moisture readings over a number of monitoring points as well as a soil moisture - depth - profile.

HOW DOES THE METASPHERE SOLUTION WORK?

The **Metasphere Point Colour** range can be connected to up to ten soil moisture, or soil moisture profile, probes using the SDI-12 protocol. Additional rain gauges can be connected to the **Point Colour** RTU to give a more complete picture of the current irrigation needs by providing information on time of rainfall and accumulation data.

User-defined alarms can be used to automatically inform the client when levels of soil moisture drop to a point which will have a negative affect on the crop. Conversely, irrigation can be delayed or even cancelled.

Data can also be sent to both FTP and DNP3 servers where subsequent alarms can be generated by the user, or data can be used to perform control functions.



FIND OUT MORE!

If you would like to dynamically monitor your soil, get in touch to find out how **Point Colour** RTU devices can transform your network:



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