

®

METOS

sm

Visit our Webpage: www.metos.at

The portable soil moisture, evapotranspiration and weather monitor at your place right in your crop!

Precision irrigation requires information about crop water use and soil moisture. μ METOS[®]sm is an easy-to-handle instrument which provides you with all this information.



Instantaneous read-out of

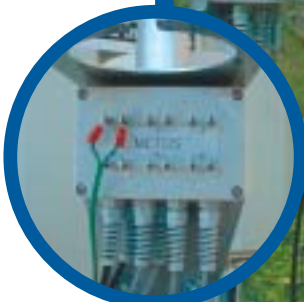
- Continuous soil moisture measurements in different profiles
- Crop-specific evapotranspiration
- Degree day accumulation and chilling units
- Disease warnings
- Weather information

all at your finger tips!

Continuous, in- field soil moisture measurement in your crop as well as the calculation of crop evapotranspiration is provided automatically and in real time by this new system. μ METOS[®]sm gives you all of this information at your finger tips in order improve your irrigation management practice. This will help you to:

- Reduce the amount of water used in irrigation
- Improve yield and quality
- Reduce pumping energy consumption
- Reduce wear and tear on irrigation systems
- Minimize leaching of soluble plant nutrients
- Reduce irrigation labour costs
- Help prevent groundwater pollution

Pessl Instruments is a world wide operation that has been manufacturing electronic weather stations and warning systems since the 1980's. Ask for more information about the METOS electronic weather station line.



Turning Information into Profits



µMETOS®sm is a small, mobile, battery powered electronic weather and soil moisture monitor that uses the latest chip technology. It is easy to install and can be used in all crops, all soil types, and all irrigation systems. µMETOS®sm is a cost effective and user friendly instrument that continuously measures soil moisture using Watermark® sensors, calculates ET (Evapotranspiration) figures by the results of temperature, relative humidity, wind speed and solar radiation sensing and reports rainfall, leaf wetness and brightness in your fields or farm. **What are the features?**



Display all information in the field - The main logger of µMETOS®sm is completely sealed and protected against moisture. A two-line display provides all information on moisture content, evapotranspiration and all weather data directly in the field. µMETOS®sm measures weather parameters every 5 minutes and stores the hourly averages for up to one year in the logger memory.



Accurate and proven sensors

Temperature, Relative Humidity and Global Radiation - Simple but effective design allows accurate measurements in all world climate zones. Best natural ventilation of the sensors and protection against dust, pollution, salt etc. allows long service intervals.



µLink PC Software - The systems comes with a comprehensive, but easy to use, software that helps you analyze the data in numerous ways. Many weather stations and farm fields can be administrated by one computer and software license. µLink is an open platform for developers that provides a number of export filters to other programs. µLink supports pocket PC and Palm OS PDA platforms.



Soil Moisture - The Watermark sensor is a proven, well documented, and accurate method of measuring soil water content. It is a granular matrix type sensor whose electrical resistance varies with soil moisture content. The sensor is read by the µMetos® sm which converts the electric resistance reading to a calibrated reading of centibars of soil water suction. Patented in 1985 and manufactured by IRRMETER COMPANY since 1989, this sensor was been a major breakthrough in soil moisture measurement technology and has demonstrated itself to be a practical substitute for tensiometric measurement in most agricultural and landscape irrigation environments. In order to improve the accuracy of data all instruments have a soiltemperature which will calibrate the Watermark automatically. Up to six Watermark sensors can be connected to one µMETOS®sm.



Data transfer and ease of use - An infrared link is a modern and cost effective way to transfer data to a personal computer. The entire weather station can be operated by one rotary switch and two push buttons. Build your own site-specific weather database at no additional cost!



Rainfall - Our WMO type self-emptying, tipping- spoon mechanism is exceptionally accurate with a resolution of 0.2 mm (0.01"). For cold climates and winter use, a rain collector heater can be provided.



Fully integrated solution - µMetos®sm is the only instrument which will provide you with real time, in-field information about crop water consumption, soil moisture and weather data.



Wind Speed - The rugged, WMO approved instrument is sensitive to the lightest breeze and withstands high winds (up to 200 km/hour).

Technical Features and Models

µMETOS® SM Logger Power supply: 6x1,5 Volt AA battery
 Dimensions: IP 65 housing - Length 270 mm (11.7 inch) - Diameter 115 mm (5 inch)
 Working temperature of Logger: -30 to 60°C (-24 to 140°F)
 Working temperature of Display: 0 to 60°C (30 to 140°F)
 IR Interface: 115Kb Water tight connectors Memory size: 2 MB Weight: 600 gr

Model Type	Standard Sensor Configuration
SMR50	Soil temp., 6 Watermarks
SMR50NW	Soil temp.
SMR100	Temp./RH/Day length/Soil temp.
SMR200	Temp./RH/Day length/Soil temp./Rainfall/Leaf wetness
SMR250	Temp./RH/Day length/Soil temp./ Leaf wetness/Rainfall/Global Radiation
SMR300	Temp./RH/Day length/Soil temp./Rainfall/Global Radiation/Wind speed Sensor Options: up to six Watermarks on models (SMR50NW to SMR300)

Turning Information into Profits

Distributor:



PESSL INSTRUMENTS GmbH.

Werksweg 107 • 8260 Weiz • Austria
 Tel.: ++43(0)3172-5521
 Fax: ++43(0)3172-552123
 e-mail: sales@metos.at