



METER PRODUCTS

Get Ready for Field Season

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METER delivers revolutionary products and services. We do this by connecting science, engineering and design to deliver precisely what our customers need.

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TEROS 22

SOIL WATER POTENTIAL SENSOR

The newest generation of matric water potential sensor is now the quickest water potential sensor to install and remove, with the same high accuracy and low maintenance you've come to expect and trust from METER. Over 40 years of experience has brought us to the next evolution of simple and precise water potential measurements — Introducing the TEROS 22.



Scan the QR code or visit meter.ly/teros22



CONTINUOUS MONITORING WITH SEASONAL FLEXIBILITY

Choose an instrument that conforms to your installation needs instead of compromising your research. While trenching at installation and removal works for some, it is limiting for research areas such as agricultural environments and geotechnical engineering projects. That's why the TEROS 22 is designed with the flexibility to be installed with a drill-mounted masonry bit or the traditional trenching method, making water potential measurements available to just about any application. Keep the sensor in place for years at a time for continuous monitoring or remove seasonally, giving you the flexibility to adapt to changing plans and work around seasonal agricultural schedules.

A TRUE FULL-RANGE WATER POTENTIAL SENSOR THAT'S LOW MAINTENANCE & LOW COST

The TEROS 22 water potential sensor is incredibly easy to use. It requires no maintenance, and it's accurate enough for most applications. In fact, the TEROS 22 provides an even more accurate soil moisture picture than measuring water content alone. Plus, unlike water content, matric potential isn't dependent on soil type, so you can compare moisture between different sites. Just like the TEROS 21, the TEROS 22 is surprisingly affordable and measures all the way from near saturation to air dry (0 to -100,000 kPa) making them both true full range water potential sensors.

ZENTRA CLOUD

YOUR RESEARCH ASSISTANT

Increased data is more of a burden than help if it drains your limited resources to obtain, store, and process it. ZENTRA Cloud works with the ZL6 data logger to start your analysis by automating processes and common calculations. It aggregates all your data in one easy place and automatically graphs it in near-real time.



Scan the QR code or visit meter.ly/zentra

TIE THE WHOLE SYSTEM TOGETHER USING THE ZL6 AND ZENTRA CLOUD

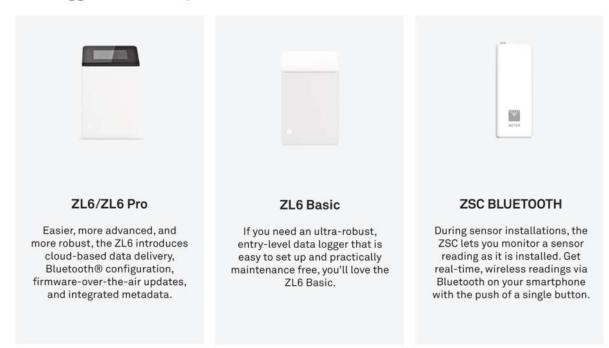


Choose from our system of research-grade sensors, software, and lab instrumentation, and enter the world of research made simple.

- + WEATHER MONITORING | ATMOS 41W, ATMOS 22, ATMOS 14
- + SOIL SCIENCE | TEROS 32, TEROS 12, TEROS 21, TEROS 22
- + HYDROLOGY | HYPROP, SATURO, KSAT
- + LABORATORY INSTRUMENTS | HYPROP, PARIO, KSAT, WP4C, VARIOS
- + THERMAL PROPERTIES | TEMPOS, VARIOS
- + PLANT SCIENCE | SC-1, ACCUPAR LP-80, NDVI/PRI

Products

Data loggers / telemetry



go.meter.ly/zl6 go.meter.ly/basic go.meter.ly/ZSC



Weather



ATMOS 41

The world's best all-in-one weather station for atmospheric measurements that doesn't limit you with other sensors.

Measures 12 Weather Variables

go.meter.ly/ATMOS-41



ATMOS 41W

Wireless Remote Weather Station

We think getting your data shouldn't be complicated or costly. And we think wireless should actually be wireless. That's why we made the ATMOS 41W.

Measures 10 Weather Variables

go.meter.ly/41W



ATMOS 22

Accuracy. Dependability.
Affordability. You get all three
with the ATMOS 22 ultrasonic
wind anemometer.

Wind Speed & Direction

go.meter.ly/ATMOS22



ATMOS 14

The ATMOS 14 will rapidly and reliably measure air temperature, relative humidity, barometric pressure, and vapor pressure, making benchmarking quick and hassle free.

Measures 4 Weather Variables



Soil water content / soil temperature

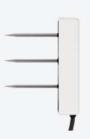


TEROS 10

The new, ultra-robust TEROS 10 soil moisture sensor delivers scientific accuracy and reliability at a price that makes large sensor networks economically practical.

Water Content

meter.ly/teros10



TEROS 11

The TEROS 11 delivers a large volume of influence, reduced sensor-to-sensor variability, and a near-bulletproof form factor, which lasts up to 10 years in the field.

Water Content & Soil Temp

meter.ly/teros11



TEROS 12

The all-new TEROS 12 soil moisture sensor delivers an excellent price-to-performance ratio in a device that is easy to use and includes electrical conductivity.

Water Content, Temp, & EC

meter.ly/teros12



ECH20 EC-5

The ECH2O EC-5 soil moisture sensor delivers researchgrade accuracy at a price that makes large sensor networks economically practical.

Water Content



ECH20 10HS

The 10HS soil moisture sensor is better at characterizing spatial variability as it averages soil moisture over a greater volume.

Water Content



MAS-1

The MAS-1 is a current-based soil moisture sensor with ultralong cable lengths.

Water Content

go.meter.ly/EC5

go.meter.ly/10HS

go.meter.ly/MAS1







TEROS Borehole Installation Tool

TEROS Borehole Installation Tool was engineered to provide easier, faster, and better sensor installation at greater depths.



TEROS 54

We designed the TEROS 54 soil moisture profile probe to make every step of your measurement process easier—without sacrificing accuracy or durability.

Water Content & Temp



TEROS 06

The ultra-robust TEROS 06 is a research-grade temperature profile probe that delivers accurate soil temperature data for better models and predictions.

Soil Temp at 6 Depths

go.meter.ly/TEROS06

go.meter.ly/tool

go.meter.ly/TEROS54



RT-1

Easy-to-use sensor for measuring the temperature of soil or other materials.

Soil Temp

go.meter.ly/RT1



Soil water potential / soil suction





TEROS 21

The TEROS 21 matric potential sensor is incredibly easy to use and surprisingly affordable.

Water Potential & Temp

go.meter.ly/TEROS-21



TEROS 22

The TEROS 22 matric potential sensor offers high accuracy, low maintenance, and quick installation and removal.

Water Potential & Temp

meter.ly/teros22



TEROS 31

Nobody in the world makes a tensiometer this small, this simple, or this precise. Trust the TEROS 31 for fast, accurate point to point water potential in all your tightest spaces.

Water Potential & Temp

go.meter.ly/TEROS31





TEROS 32

The new plug-and-play TEROS 32 tensiometer combines legendary precision engineering with the power of ZENTRA Cloud, giving you easier, faster, more accurate data in near-real time.

Water Potential & Temp

go.meter.ly/TEROS32

Hydrology



SATURO

We think you should spend less time on complex processes and more time being productive. That's why we automated almost everything in the new SATURO infiltrometer.

Saturated Hydraulic Conductivity

go.meter.ly/SATURO



MINI DISK INFILTROMETER

Get a more complete picture of highly variable unsaturated hydraulic conductivity with the infiltrometer that gives you more measurements for less time, less effort, less expertise, and less money.

Unsaturated Hydraulic Conductivity

go.meter.ly/MINIDISK



HYDROS 21

Measure water depth, temperature, and electrical conductivity. Lowcomplexity, low-maintenance, and low-cost design saves you time, hassle, and money.

Water Level, Temp, & EC

go.meter.ly/HYDROS



G3 LYSIMETER

The Drain Gauge G3 is an easyto-use lysimeter specifically designed to measure deep drainage over larger areas at an affordable cost.

Deep Drainage & EC



DRAIN GAUGE G3 AUTOPUMP

The AutoPump automatically drains the Drain Gauge G3 reservoir into bottles for later collection or away from the measurement area.

go.meter.ly/G3

go.meter.ly/G3pump



Lab instruments



PARIO

A revolutionary new method for soil particle analysis.
Automated, simple, and fast—with much less human error than traditional methods.

Soil Particle Size Analysis

go.meter.ly/PARIO



HYPROP 2

Automated calculation of high-resolution soil moisture release curves and unsaturated hydraulic conductivity—in just days, instead of months.

Soil Moisture Release Curves & Unsaturated Hydraulic Conductivity

go.meter.ly/HYPROP



WP4C

The WP4C measures water potential by determining the relative humidity of the air above a sample in a sealed chamber (conforms to ASTM D6836).

Water Potential in the Lab

go.meter.ly/WP4C



KSAT

The KSAT is the only easy-touse automated setup for taking saturated hydraulic conductivity measurements in the lab. Best of all, it's completely integrated.

Saturated Hydraulic Conductivity



VAPOR SORPTION ANALYZER

For understanding complex soil issues like clay behavior, specific surface area, and more the VAPOR SORPTION ANALYZER is your simplest, most accurate option.

Soil Adsorption & Desorption Curves



VARIOS

VARIOS automatically generates complete, high-resolution dry down curves with less effort and less cost, so you can focus on what you love.

Thermal Dryout Curves

go.meter.ly/KSAT go.meter.ly/VSA go.meter.ly/VARIOS

Thermal properties



TEMPOS

More accurate than any thermal properties analyzer in its class, with an incredible one-minute read time.

Thermal Conductivity/Resistivity Thermal Diffusivity & Specific Heat



VARIOS

VARIOS automatically generates complete, high-resolution dry down curves with less effort and less cost, so you can focus on what you love.

Thermal Dryout Curves

go.meter.ly/TEMPOS

go.meter.ly/VARIOS

Plant and canopy



PHYTOS 31

The PHYTOS 31 leaf wetness sensor is not only a more accurate instrument, it's also the easiest to set up, making it a simple and straightforward solution.

Leaf Wetness

go.meter.ly/PHYTOS31



ACCUPAR LP-80

The LP-80 is a highly accurate way to determine canopy growth and canopy light interception (PAR and LAI), along with calculating fractional interception and crop coefficient.

Light Interception (PAR & LAI)

go.meter.ly/LP80



SC-1 LEAF POROMETER

Quick measurements. Easy-touse engineering. Low cost in the short and the long run. The SC-1's breakthrough steady-state technology makes it the best for measuring stomatal conductance.

Stomatal Conductance

go.meter.ly/SC1





NDVI SENSOR

Apogee NDVI sensors combine an ultra-rugged form with sophisticated cloud data delivery for an unbeatable priceto-performance ratio.

NDVI



PAR SENSOR

The SQ-521 PAR Sensor provides accurate and costeffective measurement of photosynthetically active radiation (PAR) from all light sources used to grow plants.

PAR



IRT

The IRT infrared thermometer monitors surface temperature by measuring the thermal energy radiated from any surface.

Surface Temp

go.meter.ly/NDVI

go.meter.ly/PAR

go.meter.ly/IRT



PYR Sensor

The PYR solar radiation sensor is designed for continuous outdoor use and is completely waterproof and submersible.

Solar Radiation

go.meter.ly/PYR



NET RADIATION SENSOR

If you need research-grade net radiation accuracy at an affordable price, then you'll love the easy-to-use Apogee Net Radiometer.

Net Radiation

go.meter.ly/radiation



ULTRAVIOLET (UV) SENSOR

The low-cost Apogee Ultraviolet (UV) Sensor is a scientific-grade sensor that provides the accuracy you need for less. Access remote data in real-time, wherever you are.

Total Radiation from 300 - 400 nm

go.meter.ly/UV

Supporting sensors



SO-411 Oxygen Sensor

The rugged, reliable SO-411 Oxygen Sensor is perfect for the lab or field. And the best part? Easy remote data access through ZENTRA Cloud.

Soil Oxygen

go.meter.ly/oxygen



ECRN-100 Rain Gauge

High-resolution rain gauge for measuring precipitation and for use in scientific research.

Precipitation

go.meter.ly/ECRN100



ECRN-50 Rain Gauge

Low-resolution rain gauge for measuring irrigation events.

Precipitation

go.meter.ly/ECRN50



ECT

An easy-to-use research-grade air temperature sensor.

Air Temp



ES-2

The ES-2 is designed to measure the electrical conductivity of water in a pipe or tank.

Electrical Conductivity



PS-1

The PS-1 Irrigation Pressure Switch adds irrigation water on/ off data into the soil moisture data set.

go.meter.ly/ECT

go.meter.ly/ES2

go.meter.ly/PS1



FM-25 Flow Meter

The FM-25 combines the accuracy of positive displacement meters with the reliability and economy of nutating disc technology.



D1 DENDROMETER

The D1 Dendrometer is a simple tool to manually measure changes in the circumference of tree stems over time.

Tree Circumference



VS-Pro

The VS-pro series of vacuum systems are capable of applying a constant or tension-controlled vacuum for long-term monitoring projects. Keyboard display allows for status checks and configuration without hooking it up to your PC.

Vacuum Pump

go.meter.ly/VSPRO

go.meter.ly/FM25

go.meter.ly/D1



Vacuporter Portable Electric Vacuum

This portable vacuum has a rugged case and uses a powerful pump and rechargeable battery, which make it easy to collect pore water samples at remote locations.

Vacuum Pump



SPE20 Suction Cup with Shaft Storage

The SPE20 allows for water and solute collection down to depths of 8 meters that could not normally be collected from other pore water samplers.

Water & Solute Collection



SKS20 Suction Cup with Shaft Storage

The SKS20 allows for water and solute collection down to depths of 8 meters that could not normally be collected from other pore water samplers.

Water & Solute Collection

go.meter.ly/vacuporter

go.meter.ly/SPE20

go.meter.ly/SKS20





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