## PLANT MOISTURE

## Plant Moisture System

Measures Plant Water Potential using the Scholander pressure bomb technique

Low cost system using a dial gauge readout of pressure

Many safety features - solid brass chamber, screw thread closure, clear perspex shield and eye protection included

Choice of chamber heads for fleshy or woody samples

3 models for 0-40 bar, 0-50 bar or 0-80 bar maximum working pressure



Skye have been designing and manufacturing digital plant moisture systems since 1987. Our policy of listening to our users comments and requirements have resulted in several design upgrades and additions over the years, the latest being the production of this analogue dial gauge version.

By replacing the original electronic pressure transducer with a traditional dial gauge readout, considerable savings are made making this system ideal for projects with a low budget.

The system uses the same quality design with user safety having the highest priority. The large sample chamber is machined from a single solid piece of high grade brass. The chamber heads have a unique multistart thread giving easy tightening. This designs also ensures that the chamber can never be pressurised unless the head is secure.

Each system is individually tested and certified by an independent test house, to twice its working pressure. A clear perspex shield and safety eye spectacles are provided with each system.

The choice of 3 maximum working pressures and 2 chamber heads makes the system suitable for many different kinds of plant measurements. From soft, fleshy specimens to grasses and needles to harder woody species.

The water potential pressure of the plant sample is read off the large, clear dial gauge when moisture is first seen coming from the freshly cut stem.

The gauge has a maximum pressure needle which can be used to 'freeze' the reading, allowing the user to concentrate on the specimen and not on the gauge.

The system is highly portable. It can be used with small scuba diving gas bottles in the field, or with standard large gas cylinders in the laboratory.



## **SPECIFICATIONS** Dimensions Chamber Low Pressure High Pressure Weight **Dimensions** Head Head **SKPM 1405** System 135mm 9Kg Volume 0.54 litres SKPM 1435 152mm Screw clamp seal Gentle push fit seal Gas Bottle 317mm 5Kg 70mm **Operating Pressure** Safety Valve Test Pressure Gas Used Readout 0-40 bar Twice operating Nitrogen Dial pressure gauge Factory set to in units of Bar with 0-50 bar pressure Compressed Air maximum operating 0-80 bar Carbon Dioxide maximum pressure pressure reached indicator Flexible hose Controls Panel Gas Connector Chamber Power Chamber Fill / No Power **DHS 440BP** 3/8 BSP Solid Brass, Chrome Vent Valve Required Female plated multi-start thread for head Chamber Fill / fixing ORDERING INFORMATION Rate Control System SKPM 1405/40 Portable Plant Moisture System max. Working pressure 50 bar supplied with low pressure head, 6mm specimen adapter & blank stem seal. SKPM 1405/50 Portable Plant Moisture System max. Working pressure 50 bar supplied with high pressure head, 3mm lower compression washer, 4mm upper compression washer & blank stem seal Portable Plant Moisture System -SKPM 1405/80 Skye Instruments Ltd max. Working pressure 80 bar -21, Ddole Enterprise Park supplied with high pressure head, Llandrindod Wells 3mm upper compression washer, 4mm lower compression washer Powys LD1 6DF & blank stem seal. **United Kingdom** Accessories **SKPM 1435** Small Air Bottle - usually 3 litre

Regulator & 'A' Clamp for bottle

Flexible hose to connect PMS to

Rubber stem seals for 0-40 bar

Rubber stem seals for 0-50 and 0-80

regulator / bottle

bar systems

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Plus many more, please enquire

**SKPM 1437** 

**SKPM 1440** 

**SKPM 1447** 

**SKPM 1460**