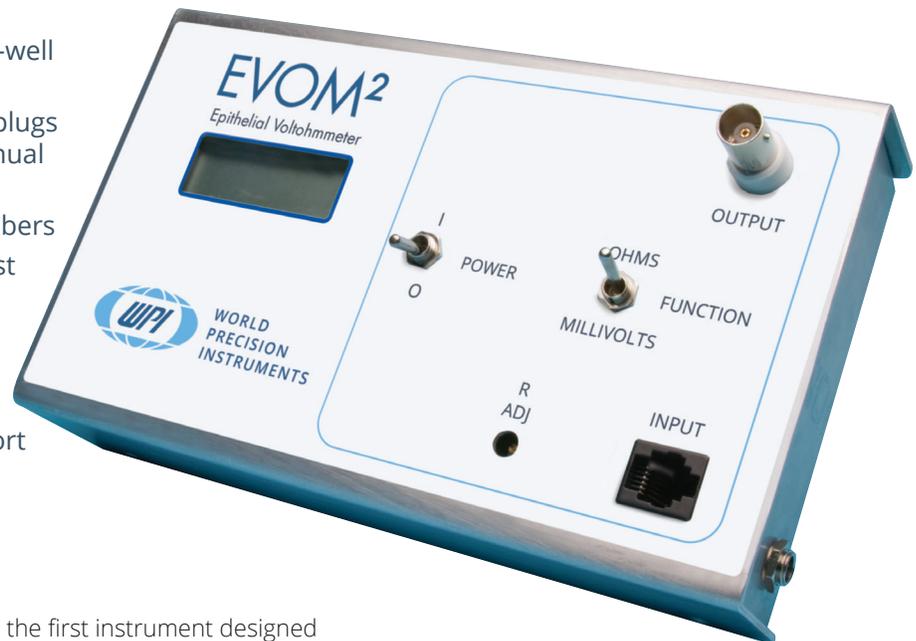




EVOM²

Epithelial Volt Ohm Meter

- Manual TEER measurements of epithelial cells in 6-, 12-, and 24-well plates
- Electrically isolated meter that plugs into a standard outlet for continual readout without push buttons
- Compatible with Endohm chambers
- STX2 manual electrodes and test electrode included with every meter
- Free standing with tilt bail, making viewing results easy
- Standard analog BNC output port

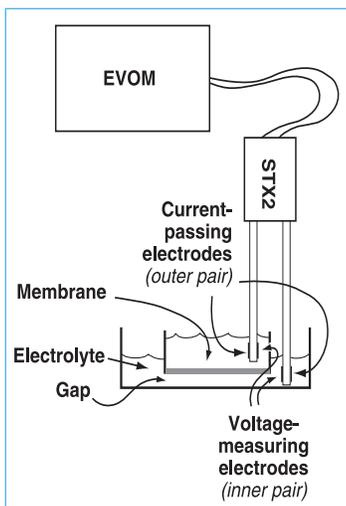


The EVOM was the first instrument designed specifically to perform routine Trans Epithelial Electrical Resistance (TEER) measurement in tissue culture research. **EVOM²** is the next generation, redesigned for ease of use. The **EVOM²** not only qualitatively measures cell monolayer health, but also quantitatively measures cellular confluence. The unique electronic circuit of the **EVOM²** and the included **STX2** electrode detect the confluence of the cellular monolayer. When combined with WPI's Endohm chamber, the **EVOM²** can also be used to perform more accurate quantitative measurements or lower resistance measurements like transendothelial electrical resistance measurements.

The isolated power source of the **EVOM²** was specifically designed to avoid adverse effects on tissue and the formation of electrode metal deposits, even when it is plugged into a standard wall outlet.

Now, the **EVOM²** is always on when you need it. In addition, its rechargeable battery allows up to 10 hours of mobile use. The four and a half digit readout provides a range of 1-9,999 Ω . The included test electrode lets you calibrate the resistance measurements for an accurate reading every time. An analog BNC output is standard with the **EVOM²**, providing an output port for recording data or remote display of the **EVOM²** output.

EVOM² comes complete with the popular **STX2** "chopstick" electrodes, 4 mm wide and 1mm thick. Each stick of the electrode pair contains a silver/silver-chloride pellet for measuring voltage and a silver electrode for passing current. The small size of each electrode is designed to facilitate placement of the electrodes into a variety of standard cell culture wells.



EVOM²

Epithelial Volt Ohm Meter

Trans Epithelial Electric Resistance (TEER) Measurements

During the last two decades TEER measurements have become universally established as the most convenient, reliable and non-destructive method to evaluate and monitor the growth of epithelial tissue cultures *in vitro*. The confluence of the cellular

monolayer is quickly determined by a sharp increase in TEER. First introduced by WPI in the mid-1980's, TEER measurement technology has since been perfected and expanded to include a range of TEER related manual and automatic instrumentation.

Features

Rechargeable Battery — EVOM², which plugs into a standard wall outlet, comes with an internal NiMH 6V 2200 mAH rechargeable battery backup. The battery charges whenever the unit is plugged in. If the battery runs low, the EVOM² automatically shuts down.

Tilt Bail — EVOM² is free standing, making it easier to read.

4½-Digit Display — The range of 1-9,999 eliminates the need for a Range toggle switch.

Analog Output — BNC connection provides a port for recording or remote display of the EVOM² output.

Test Resistor — Testing the measuring circuit and the input jack is as simple as inserting the 1,000Ω test resistor (included) and observing the display.

Hands-Free Operation — When the power is on, EVOM² displays a readout. You never have to push a button to see the reading.



SPECIFICATIONS

| | |
|------------------------------------|---|
| MEMBRANE VOLTAGE RANGE | ±200 mV |
| RESOLUTION | 0.1 mV |
| RESISTANCE RANGE | 0 to 9999 Ω |
| RESISTANCE RESOLUTION | 1 Ω |
| AC SQUARE WAVE CURRENT | ±10 μA nominal at 12.5 Hz |
| POWER | Internal rechargeable 6V NiMH 2700 mAH battery with external 12 VDC supply for recharging |
| NOMINAL BATTERY RUN TIME | 10 hours |
| BNC OUTPUT | 1-10 V (1 mV/ohm) |
| DIMENSIONS | 19 x 11 x 6 cm (7.25" x 4.25" x 2.30") |
| WEIGHT | 1.4 kg (3 lb) |
| ELECTRODE CONNECTION | RJ-11 connector (telephone style) |
| TEST RESISTOR | External, 1000 Ω |
| ENVIRONMENTAL RANGE | 10-38°C (50-100°F) 0-90% non-condensing relative humidity |



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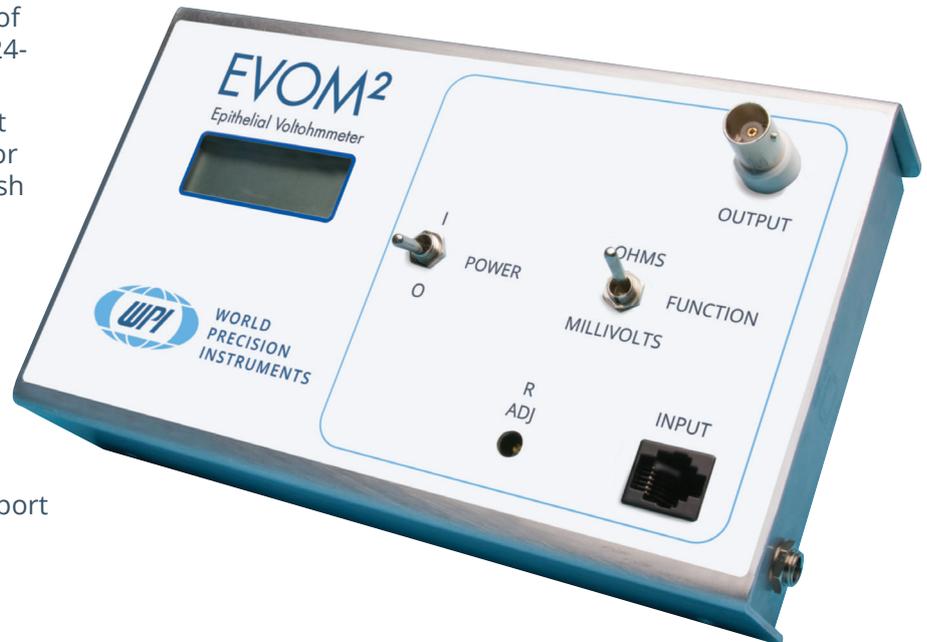
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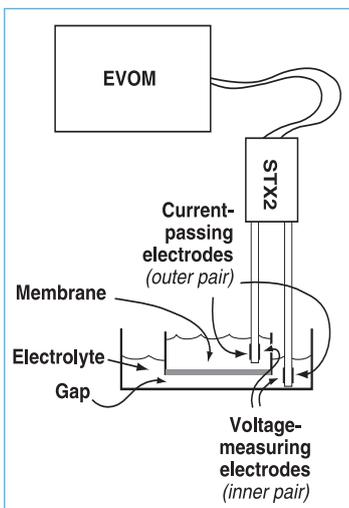
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