WORLD
PRECISION
INSTRUMENTS

EVOM™ MANUAL

Leading the Market with our EVOM Technology

www.wpiinc.com/evommanual

TEER Measurement with Auto Data Logging

Introducing the EVOM™ Manual

WPI's EVOM™ Manual is the gold standard for delivering stable and repeatable Trans Epithelial Electrical Resistance (TEER) measurements. The EVOM™ Manual qualitatively measures cell monolayer health and quantitatively measures cell confluence by determining an increase or a plateau in tissue resistance detected using our innovative EVOM™ technology. The EVOM™ Manual produces a low AC current that avoids electrode metal deposits and is specially designed for the non-destructive testing of epithelial monolayer confluence in cell cultures. Additionally, resistance readings are unaffected by membrane capacitance or membrane voltage. WPI's state of the art EVOM™ technology provides you with real time valuable feedback during experiment measurements.

The Gold Standard: WPI's EVOM™ TEER technology has been noted in over 16,000 published, peer-reviewed research papers.

APPLICATIONS

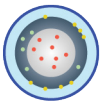

Confluence of Monolayer


Drug Discovery


Blood Brain Barrier (BBB)

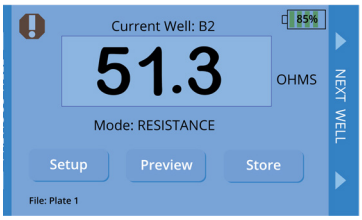

Epithelial or Endothelial Barrier


Intestinal Drug Absorption: Caco-2 3-D Tissue Function

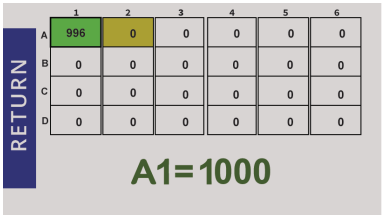

Permeability or Transport of Ions or Drugs


Lung *In Vitro* Models for COVID Study

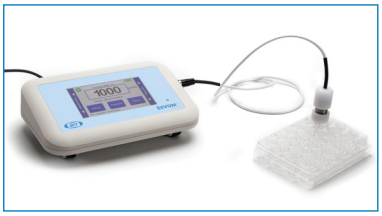
EVM-MT-03-01



The main EVOM™ Manual screen displays information and lets you make measurements.



The preview screens, like this 24-well preview, gives a quick visual of the plate you are measuring.



The EVOM™ Manual with the new STX4 electrode simplifies TEER measurement.

SPECIFICATIONS

Tissue Sampling Frequency	12.5 Hz
Sample Averaging	20 samples per second
Resistance Ranges	• 0 to 10,000 Ω • 0 to 50,000 Ω • 0 to 100,000 Ω +5%
Auto Mode	1 to 100,000 Ω auto current 2µA, 4 µA, 10 µA

Resistance Resolution	0.1 Ω (under 200 Ω); 1 Ω (over 200 Ω)
Resistance Accuracy	• 0.1 Ω (under 200 Ω), 1 Ω (over 200 Ω) 0.1% • 100,000 Ω ± 2 µA (to 105 KΩ)
Accuracy Resistance	0.1 Ω (200 Ω); 1 Ω (above 200 Ω)
Data Logging	Continuous via USB (PC, Mac, Linux)

RATION AND ON

FOOTSWITCH FOR HANDS-FREE RECORDING

PREVENT DATA LOSS WITH AUTO SAVE AND DATA RECOVERY WHEN BATTERY IS LOW

LOW NOISE DESIGN OFFERS GREATER RESOLUTION AND ACCURACY

STX4

with REPLACEABLE BLADES

TEER MEASUREMENT ELECTRODE

The STX4 electrode was designed for easy insertion into many 24-well plates. It is location re-placeable in the insert for repeatable and consistent measurements.

- Designed for 12 and 24-well plates
- Hands-free stable measurements
- Mitigates electrical and cell phone interference
- Consistent results and no need for multiple readings
- Easy to maintain

ELECTRODE OPTIONS

EVM-EL-03-03-01

STX4

- Greater measurement precision than STX2/STX3
- Hands-free operation
- Cable blocks RF interference
- Low media volume
- Longer life with replaceable blades
- No chloriding necessary (coated tips)

EVM-EL-03-02-xx

STX HTS

- Smaller tip size than the STX2 electrode
- Constructed for durability
- Fits neatly into the keyhole-shaped filter well
- Electrode design reduces chance of contamination

EVM-EL-03-01-xx

ENDOHM

- Stability and reproducibility superior to the STX2 electrodes to 1% tolerance
- Can be used with 6, 12 or 24-well plates with removable inserts
- Symmetrical electrode pattern disperses test current uniformly

WORLD PRECISION INSTRUMENTS

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