



WORLD
PRECISION
INSTRUMENTS

EVOM™ MANUAL

Leading the Market with our EVOM Technology



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.

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

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APPLICATIONS



Confluence of Monolayer



Drug Discovery



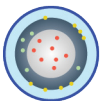
Blood Brain Barrier (BBB)



Epithelial or Endothelial Barrier



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



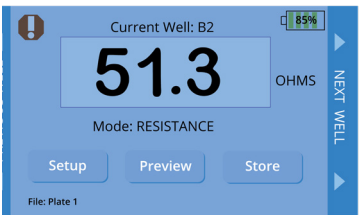
Permeability or Transport of Ions or Drugs



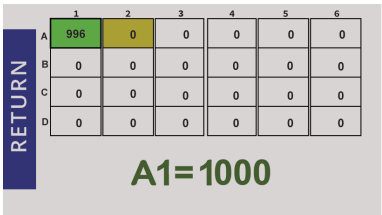
Lung *In Vitro* Models for COVID Study



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	Resistance Resolution	0.1 Ω (under 200 Ω); 1 Ω (over 200 Ω)
Sample Averaging	20 samples per second	Resistance Accuracy	• 0.1 Ω (under 200 Ω), 1 Ω (over 200 Ω) 0.1% • 100,000 Ω ± 2 μA (to 105 KΩ)
Resistance Ranges	• 0 to 10,000 Ω • 0 to 50,000 Ω • 0 to 100,000 Ω +5%	Accuracy Resistance	0.1 Ω (200 Ω); 1 Ω (above 200 Ω)
Auto Mode	1 to 100,000 Ω auto current 2μA, 4 μA, 10 μA	Data Logging	Continuous via USB (PC, Mac, Linux)



**ELIMINATES ERRORS AND
REDUCES EXPERIMENTAL
PROCESSING TIME**



**AUTO DATA LOGGING
ELIMINATES THE NEED TO
TRACK DATA BY HAND**



**THE SMALL FOOTPRINT
ALLOWS MORE BENCH
SPACE**



**EASY CALIBRATION AND
VERIFICATION**



**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



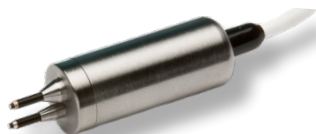
ELECTRODE OPTIONS



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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