

EVONTM MANUAL Leading the Market with our EVOM Technology



www.wpi-europe.com

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 lons or Drugs

Lung In Vitro Models for COVID Study





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

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 2μΑ, 4 μΑ, 10 μΑ	Data Logging	Continuous via USB (PC, Mac, Linux)

preview, gives a quick visual of the plate

you are measuring.

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

00 **EASY CALIBRATION AND**

VERIFICATION

FOOTSWITCH FOR

HANDS-FREE

RECORDING

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





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