

Anion Exchange Membranes

Fluorine-free

Achilles AEM Membranes

- Self-supported Membrane
- Reinforced Membrane
- Crosslinked Membrane

Io Series Ionomers

- Io-M3-S
- Io-M7-S

Applications

Water electrolysis / CO₂ reduction / Fuel cell / Flow battery

Type	Specification	Thickness	Size
M3	Self-supported membrane	45/75/115 μm	10 cm x 10 cm 20 cm x 20 cm 30 cm x 30 cm Standard A4 1.1 m x 1.1 m
M3-XL	Crosslinked membrane	45/75/110 μm	
M3-R	Woven PPS reinforced membrane	70/90/100/120 μm	
Io-M3-S	Solid Content: 2~15 wt. %		100mL
Io-M7-S			500mL > 1L, customizable



HIGHLIGHTS

- High chemical and mechanical stability, excellent ionic conductivity
- Applications: CO₂ electrolysis/H₂O electrolysis/Fuel cells/Flow batteries
- Types: self-supported, crosslinked, and reinforced

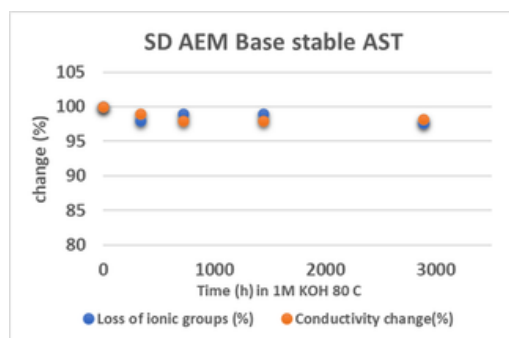
Achilles AEM Membranes

Feynman Dynamics' fluorine-free Anion Exchange Membrane (AEM) is an ion-conducting material engineered for high-performance and sustainable electrochemical applications. Our AEM enables efficient and durable operation in CO₂ electrolysis, water electrolysis, fuel cell and flow battery systems.

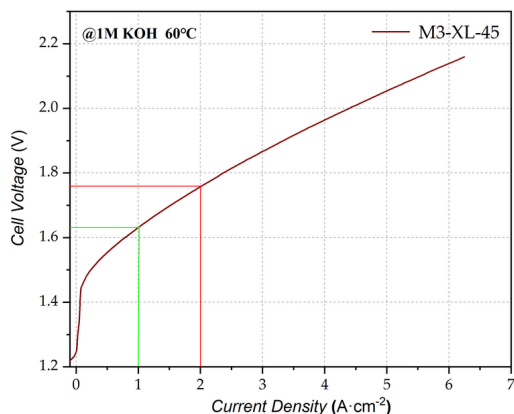
	M3	M3-R	M3-XL
Thickness (μm)	40/50/75/115	70/100/120	40/50/75
Tensile Strength (MPa) (25 ± 5°C, 40 ± 10%RH)	≥30	≥40	≥30
Elongation to break (%)	≥40	≥25	≥50
Conductivity (OH ⁻) mS/cm, to water soaked, 80°C	≥150	≥100	≥130
Chemical Stability (hour) in 1M KOH @80°C	7000	7000	8000
Water Uptake (%)	>60	>30	>40

Test Data

Note: all test are based on M3-XL-45 membrane.



1M KOH, 60C



1M KOH, 80C

