

Proton Exchange Membranes

Fluorine-free

Peris PEM Membranes

- Self-supported Membrane
- Reinforced Membrane

Io Series Ionomer

- Io-CM3-S

Applications

Water electrolysis / CO₂ reduction / Fuel cell / Flow battery

Type	Specification	Thickness	Size
CM3	Self-supported membrane	45/75 μm	10 cm x 10 cm 20 cm x 20 cm 30 cm x 30 cm
CM3-R	Woven PPS/PEEK reinforced membrane	50/70/90/120 μm	Standard A4 1.1 m x 1.1 m Roll-to-roll
Io-CM3-S	Solid Content ≥ 2 wt. %		100mL 500mL > 1L, customizable



HIGHLIGHTS

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

Peris PEM Membranes

Our proton exchange membranes are polymeric membranes functionalized with anionic groups (sulfonic acid groups -SO₃⁻) that selectively conduct cations (H⁺) and block anions, and are suitable for ion separation and transport in acidic/neutral electrochemical systems.

	CM3	CM3-R
Thickness (μm)	20/40/50/75	50-160
Tensile Strength (MPa) (25 ± 5°C, 40 ± 10%RH)	≥30	≥40
Elongation to break (%)	≥50	≥25
Conductivity (H ⁺) mS/cm, to water soaked, 80°C	≥130	≥100
Water Uptake (%)	>40	>30

Io Series Ionomer

A colloidal dispersion of ion-conductive polymers (e.g., sulfonated or aminated resins) in polar solvents. It serves as a processable precursor for coating electrodes or membranes, enabling ion transport and catalyst binding in electrochemical devices.

