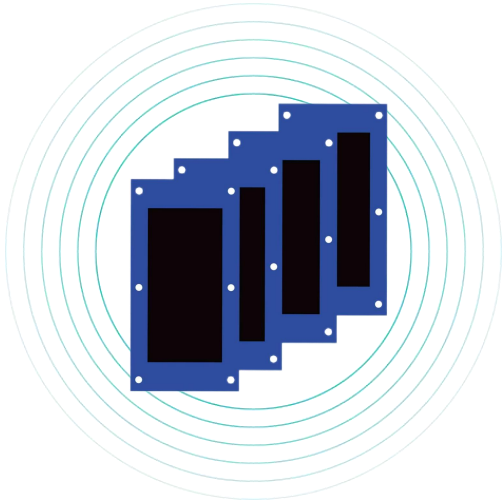


Lucifer 3.0 Membrane Electrode Assemble



High performance

High power density and long service life of the product



Independently developed and designed

Directional serialization distribution of ionomers



Accurate and controllable

Customized design and development based on customer needs

Commercial Vehicle MEA - Project/Parameters		Parameter
Total Pt load of membrane electrode (mg/cm ²)		0.4
Membrane electrode active area (cm ²)		Customizable
Operating humidity (%)		0% ~ 100%
Maximum operating temperature (°C)		95
Power density @ 2A/cm ² (W/cm ²)		1.34
Peak power density (W/cm ²)		> 2
Standard deviation of membrane electrode voltage @ 2A/cm ² (mV)		< 10
Applicable ambient temperature (°C)		-40 ~ 60
Endurance of in vehicle cycling conditions (Hrs)		20, 000
Start stop cycle durability (lap)		3, 000
Product Features		Self humidifying
Passenger Car MEA - Project/Parameters		Parameter
Total Pt load of membrane electrode (mg/cm ²)		0.35
Membrane electrode active area (cm ²)		Customizable
Operating humidity (%)		0% ~ 100%
Maximum operating temperature (°C)		95
Power density @ 2A/cm ² (W/cm ²)		1.38
Peak power density (W/cm ²)		> 2
Standard deviation of membrane electrode voltage @ 2A/cm ² (mV)		< 10
Applicable ambient temperature (°C)		-40 ~ 60
Endurance of vehicle cycle working conditions (Hrs)		10, 000
Start stop cycle durability (lap)		2, 000
Product Features		Self humidifying
Non automotive MEA projects/parameters		Parameter
Total Pt load of membrane electrode (mg/cm ²)		0.2 ~ 0.6
Membrane electrode active area (cm ²)		Customizable
Operating humidity (%)		0% ~ 100%
Maximum operating temperature (°C)		95
Power density @ 2A/cm ² (W/cm ²)		> 1.2
Peak power density (W/cm ²)		> 1.8
Standard deviation of membrane electrode voltage @ 2A/cm ² (mV)		< 10
Applicable ambient temperature (°C)		-40 ~ 60
MEA General Parameters - Project/Parameters		Parameter
Proton membrane thickness (μ m. Optional)		8 ~ 12
Carbon paper thickness (μ m. Optional)		165 ~ 290
Thickness of active area of membrane electrode (μ m. Optional)		350 ~ 600
Pt catalyst durability (circle)		> 30, 000
Carbon carrier corrosion durability (circle)		> 2, 000