



## ZKSD-CBP-600

## **Composite Bipolar Plate**

Bipolar plates are a crucial component in electrochemical devices, particularly in flow batteries. They serve multiple essential functions, including providing structural support, enabling the distribution of reactant fluids, and facilitating the collection and conduction of electrical current. In flow batteries, they separate the positive and negative electrolytes while allowing the flow of charge carriers, thus enabling efficient energy storage and conversion.

The ZKSD-CBP-600 bipolar plate is specifically designed for redox flow batteries. It has characteristics such as low resistance, high mechanical strength, and high stability.

## **Performance Parameters**

ITEM	UNIT	VALUE
Polymer Type	-	PP, POE
Polymer Content	%	42
Appearance	-	Smooth, no defects
Thickness	mm	$0.6 \pm 0.05$
Length Deviation	mm	0 ± 0.5
Bulk Resistivity	$\Omega$ cm <sup>2</sup>	≤90
Tensile Strength	MPa	≥20
Flexural Strength	MPa	≥20
Density	g cm <sup>-3</sup>	1.3
Electrical Resistivity		
Parallel to Surface	mΩ cm	≤65
Perpendicular to Surface		≤550

## **Picture**

