

# Conductivity Electrode User Manual

## 1. Application

This conductivity electrode is the measuring element of the conductivity meter. It used to measure the conductivity value of the aqueous solution or as a conductance titration.

## 2. Model and Main Technical Parameters

Model	DJS-0.1	260	DJS-1	DJS-10
Vessel Constant	$0.1 \pm 0.02$	$0.6 \pm 0.2$	$1 \pm 0.2$	$10 \pm 2$

## 3. Use and Maintenance

1. There are two kinds of conductivity electrode, shiny electrode and platinum black electrode. platinum-plated black aims to increase the effective area of the electrode sheet and relieve being polarized. So in the measurement of large conductivity solutions, using a platinum black electrode is more appropriate.
2. For the platinum black electrode, before use, it can be immersed in deionized water to prevent the platinum black inerting.
3. When platinum black coating off or fade, then you must re-plating platinum black to ensure the accuracy of the measurement readings.
4. The cell constant marked on the electrode is just for reference. If you want to test the cell constant is accurate or not, you can lookup the corresponding conductivity value K according to the concentration and temperature of the tested solution. Then the cell constant Q is calculated based on the measured resistance R .

The formula is  $Q = K \times R$  .

**See table below for details:**

Model	Solution Concentration	Solution Temperature( °C)	Conductivity Value
DJS-0.1	0.001mol/L KCL	25	$1.468 \times 10^{-4}$
		30	$1.64 \times 10^{-4}$
260、DJS-1	0.01mol/L KCL	25	$1.413 \times 10^{-3}$
		30	$1.522 \times 10^{-3}$
DJS-10	0.1mol/L KCL	25	$1.28 \times 10^{-2}$
		30	$1.414 \times 10^{-2}$

## 4. Quality Warranty

1. The quality assurance of the electrode is the period for stored. It is about one year.
2. During the warranty period, if you find some problems caused by factories and not working, the manufacturer should be responsible for the repair or return.

# Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

DFRobot:

DFR0300