

## 301DJ-C Plastic ORP Combination Electrode

### User Manual

301DJ-C plastic ORP combination electrode, is suitable for long time consistent, such as swimming pool water treatment equipment, wasted water treatment equipment, and solutions containing ion like  $S^-$  and  $I^-$ , which may react with the  $Ag^+$  from reference solution and block the junction.

This probe has following features:

- Double junction reference system, able to reduce and avoid junction being contaminated and blocked by tested solution.
- Anti-corrosion POM (Polyoxymethylene) shaft, the protection cap at the top of electrode can be screwed off. It is easy to wash bulb and junction.

#### 1 Technical Data

Range	$\pm 2000mV$	Electrolyte	Gel KCl
Sensor	( $\varnothing 0,8 \times 3$ )mm Platinum needle	Soaking Solution	3M KCl (no $Ag^+$ )
Shaft Material	PC(Polycarbonate)	Electrode Dimension	( $\varnothing 12 \times 120$ ) mm
Reference	Ag/AgCl	Connector	BNC
Junction	Double Junction	Cable	$\varnothing 3 \times 1m$
Operating temperature	0~80 °C		

#### 2 Usage and Maintenance

- 2.1 When measuring, please unscrew the bottle cap, pull out the electrode and rinse it with deionized water. After using, please put the electrode back into the bottle and screw the cap tightly.
- 2.2 The sensitive platinum needle in the front of combination electrode should not get in touch with hard things. Any damage and hairline crack will make the electrode invalid.
- 2.3 The connector of the electrode should be kept clean and dry. If being contaminated, please clean it with medical cotton and absolute alcohol and blow dry to prevent the electrode from a short-circuit and/or slow reaction.
- 2.4 The electrode's measuring tip should be soaked in the soaking bottle containing certain amount of storage solution to keep the junction unblocked. Clean the bottle and replace the storage solution if the it gets turbid and mildewed. The electrode should never be submerged in pure water or buffer solution for long.
- 2.5 If the sensor or junction is contaminated, pour the electrode into soaking solution and let it stand for 3 hours after having cleaned it with soft brush and soapy water.
- 2.6 After 1-year of use, we recommend replacing the electrode to ensure the best accuracy.

#### 3 Warranty

We warrant this electrode to be free from defects in material and workmanship and agree to repair or replace free of charge, at option of APERA INSTRUMENTS (Europe) GmbH any malfunctioned or damaged product attributable to responsibility of APERA INSTRUMENTS (Europe) GmbH for a period of SIX MONTHS from the delivery.

This limited warranty does not cover any damages due to:

Transportation, storage, improper use, failure to follow the product instructions or to perform any preventive maintenance, modifications, combination or use with any products, materials, processes, systems or other matter not provided or authorized in writing by us, unauthorized repair, normal wear and tear, or external causes such as accidents, abuse, or other actions or events beyond our reasonable control.

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