

# Rotating Electrodes.

## BluRev Rotating Disk Electrode (RDE)

The **BluRev RDE** is a versatile and rugged rotating disk electrode ideal for use with any BioLogic potentiostat/galvanostat. It is available with a wide choice of quick-fit exchangeable tips.

The BluRev RDE was designed to be used with EL-ELECTRO cells series. Please note that if you already have an EL-ELECTRO cell an additional PTFE cap is needed: **094-A-CAP**. Otherwise, **EL-BLUREV** is the cell compatible with **BluRev RDE**.

Furthermore, a special enclosure was designed for an easy operation and set-up of the **BluRev RDE**: the **BluRev Enclosure**. It makes it easy to hold the RDE body as well as the BioLogic potentiostat cables.

The RC-10k unit controls the RDE rotation speed. It offers an accuracy of  $\pm 1$  rpm over the whole rotational range for precise and fully reproducible experimental conditions. The measured rotation speed is clearly displayed on a five-digit LCD screen. The speed can be set manually or by using the analog output of a BioLogic instrument for example. Any other device with an analog output can be used.

Using EC-Lab<sup>®</sup>, you can easily program and perform a Levich experiment all in one go, and also use the new EIS element  $W_{inf}$  that will directly give you the diffusion coefficient.



BluRev RDE	Catalog n°
BluRev RDE kit (tips & cell are not included)	<b>094-RC/RDE</b>
<b>Content</b>	
RC-10k Rotation controller	<b>094-RC</b>
Rotating disk electrode (motor, shaft, electrode body with contact)	<b>094-RDE</b>
DB9 to BNC connector for external control of RC-10k	<b>092-22/1</b>
1 m BNC/BNC cable	<b>COR28100</b>
1 replacement contact	<b>094-RDE-BRUSH</b>
1 transport case	-
<b>Tips</b>	
2 mm diameter 999% Platinum disk electrode	<b>094-Pt/2</b>
2 mm diameter 999% Gold disk electrode	<b>094-Au/2</b>
3 mm diameter Glassy Carbon disk electrode	<b>094-GC/3</b>
3 mm diameter 999% Silver disk electrode	<b>094-Ag/3</b>
3 mm diameter 999% Copper disk electrode	<b>094-Cu/3</b>
3 mm diameter 999% Nickel disk electrode	<b>094-Ni/3</b>
3 mm diameter 999% Aluminium disk electrode	<b>094-Al/3</b>
3 mm diameter 316L Stainless steel disk electrode	<b>094-316L/3</b>
5 mm diameter Glassy Carbon disk electrode	<b>094-GC/5</b>
<b>Cells</b>	
EL-ELECTRO-1A cell compatible with BluRev RDE	<b>EL-BLUREV</b>
PTFE 5 holes cap compatible with BluRev RDE (needed if you already have an EL-ELECTRO cell)	<b>094-A-CAP</b>

## Specifications

Rotational range/rpm	100 - 10,000
Accuracy/rpm	1 typical over the whole rotational range
Precision/rpm	3 typical over the whole rotational range
Eccentricity/mm	<0.1
Setting resolution/rpm	10 (Manual control) or 25 (Remote control)
Materials of RDE	PEEK, Al alloy
Gas inlet for brush contact purging/mm	Ø 2
Operating temperature/°C	10 - 40
Power	24 Vdc, 1 A max
Max consumption/W	24
Dimensions/mm	RC-10k: 95x227x178 (HxWxD), RDE: 233.6 (length with tip)
Weight/kg	RC-10k: 1.00 RDE: 0.36 (without tip)



BluRev Enclosure	Catalog n°
Protective housing and stands kit for the BluRev	<b>094-ENCL</b>
<b>Content</b>	
1 stainless steel plate with M6 threaded holes to fix the support poles	-
2 support poles to hold the BluRev RDE and the cell <b>(The clamp and the clamping nut are not included)</b>	-
1 clamping flange for the BluRev	-
3 half-clamps for the potentiostat cables (all BioLogic cables are supported)	-
1 plexiglas protective housing	-
<b>Specifications</b>	
Dimensions with protective housing (HxWxD)/mm	287x318x308
Weight (with protective housing)/kg	5.3