

# **616**Rotating Electrode System

#### The Systems Approach to Rotating Electrodes

The Princeton Applied Research Model 616 Electrode Rotator is a high precision, low mass rotator that performs well with virtually any potentiostat. When connected to Princeton Applied Research electrochemical instrumentation, it uses control lines to give you remote start/stop and speed control. Using the convenient control panel and input jacks you can operate the model 616 easily for either manual or automated experiments.

#### Standard Features include:

- Front panel speed controls
- Remote analog speed control (input is summed with front panel settings)
- Front-panel and remote (TTL) on-off switching (using Princeton Applied Research stir-control signals)
- Remote analog output for speed verification
- Integral ring-stand for convenient cell mounting

For versatility, a variety of electrode assemblies are available to perform a wide range of experiments, including:

- High precision corrosion measurements
- Ultra-trace analytical determinations
- Automated Levich Plots
- Hydrodynamically-modulated voltammetry
- Cyclic stripping voltammetry





### **Accessories**

#### **Accessory Information**

Because of its wide range of applications, the Model 616 is supplied without electrodes or accessories. Since these must be ordered seperately, the ordering information is supplied below.

#### **Quick Change Disk Electrodes**

Disk electrodes 11.3 mm diameter, 1 cm<sup>2</sup> surface area. The material adjacent to the electrode surface is teflon. The electrode body is Kel-F 17mm O.D. shroud.

Model Description

RDE0001 Disk Electrode Assembly

(Includes 430 SS Disk)

RDE0002 Disk Installation Tool

#### **Quick Change Cylinder Electrodes**

Cylinder electrodes 12mm diameter, 12.4 mm height, 3 cm<sup>2</sup> surface area. The material adjacent to the electrode surface is Teflon. The electrode body is Kel-F 12 mm O.D. shroud.

Model Description

RDE0011 Cylinder Electrode Assembly

(Includes 430 SS Cylinder)

#### **Permanent Disk Electrodes**

Disk electrode 5 mm diameter permanently sealed in Teflon, 12 mm outside diameter shroud.

Model Description

RDE0004 Platinum Electrode RDE0005 Gold Electrode

RDE0008 Glassy Carbon Electrode

Cell Top

**Model**RDE0018

Description
Analytical Cell Kit

**Polishing Kit** 

Model Description

K0015 For polishing electrodes

## **Specifications**

Power	115 V ac or 230 V ac, 50/60 Hz, factory
	connected
Weight	14 lbs
Operating Temperature	10 to 40°C
Control Unit Dimensions	11 3/8" W x 10 1/8" D x 5 3/4" H
Base Dimensions	11" W x 15" D x 5 3/4" H
Motor	Permanent magnet dc, ironless rotor
Motor Power Supply	+24 V dc Nominal
Speed Control	Closed loop servo-system. Temperature
	compensated tach generator mounted on
	motorshaft, providing rotational speed
	information
Speed Range	100 RPM to 8,000 RPM
Precision	Better than ±1%
Accuracy	Better than ±3%
Controls	On/Off switch, push button potentiometer
	control speed
Motor Stop	TTL level of user-selected polarity

Europe

Farnborough

Unit B1 Armstrong Mall

Southwood Business Park

Hampshire GU14 ONR UK

Tel: +44 (0)1252 556800

Fax: +44 (0)1252 556899



#### **USA**

801 South Illinois Avenue Oak Ridge

TN 37831-0895 USA

Tel: (865) 425-1289 or (865) 482-4411

Fax: (865) 481-2410

Please see our website for a complete list of our global offices and authorized agents

www.princetonappliedresearch.com

pari.info@ametek.com



