

WaveVortex

electrode rotator

With a small footprint and affordable price, the WaveVortex is ideal for those needing to perform rotating disk electrode (RDE) or rotating ring-disk electrode (RRDE) studies with smaller lab spaces. The attractive WaveVortex design combines the rotator, control unit, shaft, and enclosure in one compact and convenient package. A new design from Pine Research - a name synonymous with electrode rotation.



Compatible with existing Pine Research
15 mm OD RDE and RRDE electrode tips



Unique Product Features

Lower Noise

Compact Design

Easy Cable/Tubing Management

Minimal Setup and Maintenance

New Start/Stop/Pause Control Features

Shaft Pre-Installed and Included in Price



2741 Campus Walk Ave · Building 100 · Durham, NC 27705 · USA

+1 919.782.8320

pinewire@pineresearch.com

pineresearch.com



Specifications

Rotation Rate

Rate Accuracy	100 to 200 RPM \pm 2 counts of display reading 200 to 8000 RPM \pm 1% of display reading
Rate Display	4 digit display indicates rotation rate (RPM)
Rate Control (front panel)	10-turn rotation rate control knob push button with Pause and Run LEDs
Rate Control (external)	allows optional rate control via a signal input located on external I/O connector 1 RPM/mV (default), 2 RPM/mV, 4 RPM/mV optional digital (TTL) motor stop input signal located on external I/O connector, front panel LED indicates when external motor stop is active
Enclosure Interlock	interlock prevents rotation when enclosure window is in raised position front panel LED indicates when enclosure window is in raised position
Rate Output	allows optional external rotation rate monitoring via a signal output located on external I/O connector output signal ratio: 2 RPM/mV

Motor

Motor Power	11 W
Control Method	closed loop servo-system (PWM) temperature compensated tachometer
Motor Type	permanent magnet
Max Continuous Torque	18.7 milliNewton-meters
Motor Protection	motor current is electronically limited

Electrical

Power Requirements	AC Mains: 100 - 240 VAC, \pm 10%; 50/60 Hz; 1 A DC Supply: 24 VDC; 1.5 A
Electrode Connections	electrode connections on the motor unit disk electrode: red banana jack ring electrode: blue banana jack
Chassis Terminal	metal banana jack located on the motor unit and also on external I/O connector
DC Common	DC Common (analog ground) connection provided on external I/O connector

Physical

Shipping Weight	24 pounds (11 kg)
Shipping Dimensions	16 x 16 x 16 in. (41 x 41 x 41 cm)
Instrument Weight	16 pounds (7.3 kg)
Instrument Width x Depth	15 x 11 in. (38 x 28 cm)
Instrument Height	with enclosure lowered: 15 in. (38 cm) with enclosure raised: 24 in. (61 cm)
Materials	enclosure base and sides: black high-density polyethylene enclosure window: clear polycarbonate electronics cabinet: black powder coated aluminum

For over fifty years, Pine Research has been the trusted source for research grade electrode rotators. Our legacy continues with the WaveVortex.

