

PINE RESEARCH: MSR ROTATOR (AFMSRCE)

SPECIFICATIONS

Power	100 - 240 VAC, +/-10%; 50/60 Hz; 2A
Weight	60 pounds (27 kg)
Shipping dimensions	24.0 x 24.0 x 24.0 in (61 x 61 x 61 cm)
Dimensions	Control Unit: 11.4 x 10.1 x 5.75 in (29 x 26 x 15 cm) Rotator and Enclosure: 18.8 x 15.5 x 21.0 in (48 x 40 x 54 cm)
Operating Temperature	10 °C to 40 °C (50 °F to 104 °F)
Motor Power	15 W
Supply Voltages	+30 VDC, -24 VDC
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Motor Type	Permanent Magnet
Motor Protection	2 Amp thermal-type circuit breaker, current limited power supplies
Maximum Continuous Torque	28.3 milliNewton-meters
Rate Control	Closed-loop Servo System, Temperature Compensated Tachometer Mounted on Motor Shaft
Rate Display	4 ½ digit display indicates rotation rate (RPM)

Rate Accuracy	100 to 200 RPM: accurate to within ± 2 counts of display reading 200 to 10,000 RPM: accurate to within $\pm 1\%$ of display reading
Controls	Front Panel: 10-turn rotation rate control knob, button to reset circuit breaker Rear Panel: Power switch
Rotation Rate Input	Allows optional external signal to control rotation rate (banana jack), selectable control ratio: 1 RPM/mV (default), 2 RPM/mV, 4 RPM/mV
Rotation Rate Output	Allows optional external monitoring of rotation rate (banana jack), output signal ratio: 1 mV/RPM ($\pm 1.0\%$)
Rotator Motor Stop	Rear panel input optional digital motor stop signal (banana jack)
Earth Ground	Metal binding post (banana jack) connects to ground lead of power cord and to control unit chassis
Common Jacks	DC common (3 black banana jacks), isolated from earth ground
Motor Slew Rate	Approximately 300,000 RPM/sec maximum (no load)
Bandwidth	> 50 Hz, -1 dB (at 1000 RPM peak to peak modulation on a 2000 RPM base rate)