

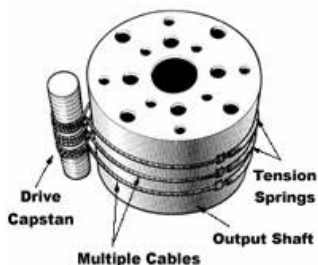
MODEL-30 Roto-Lok[®] Drive Ruggedized 2-Axis Positioner

IDEAL FOR CAMERA, ANTENNA OR INSTRUMENT POSITIONING

The Model 30 Roto-Lok[®] Drive features pan & tilt positioning with high reliability and large payload capacity. The drive system incorporates a servo motor with Sagebrush Technology's Roto-Lok[®] rotary drive for high torque with zero backlash. A 500 line per revolution encoder on the motor shaft provides high positional resolution.

On-the-fly speed and direction changes are supported by the Model-30. Motion commands to a defined position are accomplished by automatic vectoring of the Pan & Tilt axes, or by individual speed and direction control of each axis. Optionally, the gimbal software supports multiple communication protocols. Direct joystick control (no PC required) is also available.

Power and payload controls are available for a variety of applications. For camera applications, the Model 30 supports additional analog and digital I/O as well as two auxiliary serial ports for payload control options.



Zero Backlash ROTO-LOK[®] Drive

MODEL 30 Roto-Lok[®] DRIVE GIMBAL SPECIFICATIONS

We reserve the right to change these specifications at any time.

Height (inches) _____	29
Width (inches) _____	24.4
Depth (inches) _____	8 Yoke, 13.5 Base
Weight (lbs) _____	120
Payload Capacity (lbs) _____	40
Payload Inertia _____	5,000 lb-in ² , AZ; 5,000 lb-in ² EL
Travel Range (Azimuth) _____	310° Non-continuous (+/-155°)
Travel Range (Elevation) _____	+95°/-35°
Travel Rate (Max) _____	60°/sec AZ and EL
Acceleration (Max) _____	60°/sec ² AZ and EL
Positional Resolution (Deg) _____	0.0024 AZ, 0.004 EL
Input Power _____	22-36 Volts DC
Power Usage _____	125-Watts Peak
Power & Data Connectors _____	MIL-C-5015 Connector (mating connector supplied)
Payload Power _____	Pre-wired for up to 7.5 Amps
Payload Wiring _____	Pre-wired for 8 data lines (additional power/data pins available)
Payload Yoke (Width) _____	12-inch inside width
Payload Yoke (Depth) _____	9-inches elevation axis to base of yoke
Color _____	White Powder Coat standard; other colors available
Motor Controller _____	32-bit microprocessor on-board the gimbal
Controller Interface _____	Standard serial interface
Communication _____	RS-232, 422
Weather _____	Suitable For Outdoor All Weather Conditions
Manuals _____	Installation, Operating and Maintenance instructions
Routine Maintenance _____	None required
Warranty Period _____	One year (if operated according to instructions)
Operating/Storage Temp. _____	-25°C to 50°C/-30°C to 75°C (nominal)

OPTIONS

Gyro-stabilization _____	Two axis stabilized operation for ships and ground vehicles
High Resolution Encoders _____	2000 lines per revolution

Please inquire about the status, specifications and availability of the following planned options:

- Stepping Motors
- On-axis Encoders

FEATURES & Potential Applications

- **40 lb Payload Capacity**
- **Zero Backlash**
- **Wide Angular Coverage**
- **Low Maintenance**
- **Quiet Operation**
- **Payload on Axes**
- **Weather Resistant**
- **24 Volt DC**
- **RS-232/422 Communications**
- **Antenna and Infrared Sensor Pointing**
- **Camera Mounts**
- **Target Tracking**
- **Research & Development Platform**
- **Commercial & Military Mobile Applications**



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