

MODEL-30 Worm Drive Ruggedized 2-Axis Positioner

IDEAL FOR CAMERA, ANTENNA OR INSTRUMENT POSITIONING

The Model 30 Worm Drive features pan & tilt gimbaling with high reliability and large payload capacity. The drive system incorporates a NEMA 34 stepper motor with a 60:1 drive ratio for high torque. An encoder on the motor shaft provides high positional resolution.

The on-board Model 30 Stepper Motor Controller uses a 32-bit microprocessor for high-resolution micro-stepping control. The standard Digital I/O has some programmable pins available for control of peripheral devices. Additional programmable I/O options include both digital and analog signals and joystick control.

The quality, features, and performance of the Model 30 Worm Drive positioner provide precision, reliability, flexibility, operational ability in harsh environments.



MODEL 30 WORM DRIVE GIMBAL SPECIFICATIONS

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

FEATURES & Potential Applications

- **40 lb Payload Capacity**
- **Low Backlash**
- **Wide Angular Coverage**
- **Low Maintenance**
- **Quiet Operation**
- **Payload on Axes**
- **Weather Resistant**
- **48 Volt DC**
- **RS-232/485 Communications**
- **Antenna and Infrared Sensor Pointing**
- **Camera Mounts**
- **Target Tracking**
- **Research & Development Platform**
- **Commercial & Military Mobile Applications**

Height (inches) _____	29
Width (inches) _____	24.4
Depth (inches) _____	8 Yoke, 13.5 Base
Weight (lbs) _____	120
Payload Capacity (lbs) _____	40
Payload Inertia _____	10,000 lb-in ² , AZ; 10,000 lb-in ² EL
Travel Range (Azimuth) _____	310° non-continuous (+/-155°)
Travel Range (Elevation) _____	+95°/-35°
Travel Rate (Max) _____	40°/sec AZ and EL
Acceleration (Max) _____	60°/sec ² AZ and EL
Positional Resolution (Deg) _____	0.0015
Nominal Backlash (arc-min) _____	6 AZ, 8 EL
Input Power _____	48-75 Volts DC
Power Usage _____	120-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, 485
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

Extended Azimuth Range _____	-Non-continuous +/-220° available
Azimuth Drive Option _____	Zero backlash worm drive available
AC Input Power _____	Internal AC power supply 120 or 220 Volts (specify with order)

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

- Slip rings for continuous rotation applications
- DC Servomotor



3700 Singer Blvd NE Ste A + Albuquerque, NM 87109

(505) 299-6623 + Fax (505) 298-2072

www.sagebrushtech.com + 1-800-634-0209

email: sales@sagebrushtech.com