

LYCOS[®] POSITIONER DIRECT DRIVE PAN & TILT POSITIONER

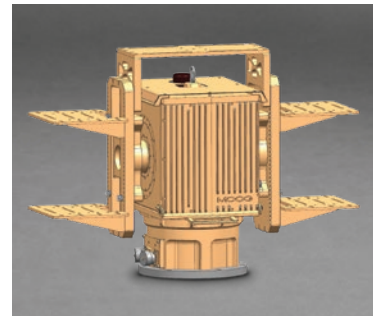


The Lycos direct drive positioner is designed to provide precision motion control for high accuracy applications. It incorporates Moog's advanced motion control, data transport, and tracking technologies. The positioner's motion control system is ultra-smooth even at extremely low speeds. Moog's data transport technology provides the high bandwidth required for modern sensors and connectivity. Integrated electronics provide both video tracking and position

tracking of radar and other target cues. Designed and proven to operate in high EMI and harsh temperature environments, the positioner's modular design can accommodate a wide range of payloads and mounting configurations.

KEY FEATURES

- High performance direct drive motion system provides optimal tracking performance of fast and slow moving targets
- Superior reliability backed by a 2-year warranty
- Ultra-smooth motion with closed loop velocity, position and position tracking modes
- Rugged design excels in harsh environments
- Network based design with available SDK provides easy integration
- 10-Gigabit data link supports modern sensors and connectivity
- 26-bit absolute encoders provide precision pointing and trajectory measurements



LYCOS® DIRECT DRIVE PAN & TILT POSITIONER

MECHANICAL SPECIFICATIONS

| Features | Specifications |
|---------------------|--|
| Dimensions | 16.46" L x 14.44" W x 21.13" H |
| Weight | 118 lbs. |
| Payload weight | 500 lbs. maximum (balanced) |
| Motion range | 360° azimuth continuous rotation ±90° elevation from horizon |
| Velocity | <0.0005°/s to 100°/s with 125 lbs. payload Higher rates with lighter payloads |
| Acceleration | 100°/s ² with 125 lbs. payload Higher rates with lighter payloads |
| Pointing resolution | 26-bit absolute optical encoders |
| Position accuracy | <0.000085° (1.5 μradians / 0.3 arcseconds) |
| Drive configuration | Direct drive brushless motors (no gearing or backlash) Closed loop velocity and position control at 1 kHz |
| Finish | Sand tan CARC or white aeroglaze A276 |

ELECTRICAL SPECIFICATIONS

| Features | Specifications |
|-------------------------|--|
| Azimuth slip ring | Single mode fiber rotary joint (FORJ) for all data I/O High current copper slip ring for power |
| Control | Ethernet and/or RS-422 serial |
| Data I/O | One (1) 10Gb ethernet copper or single mode fiber used to transport: Four (4) RS-232/422/485 serial Three (3) Gigabit ethernet Four (4) 3G/HD/SD-SDI video Two (2) analog (NTSC/PAL) video |
| Payload I/O (each side) | Default payload wiring (other options available): Two (2) coax (SDI or analog video) One (1) Gigabit ethernet Two (2) RS-232/422/485 serial Power 48 VDC at 200 watts Power 24 VDC at 200 watts |
| GPS | Single antenna GPS with multisystem support |
| Power | 48 VDC with 18A peak limit per axis 40 watts idle, 600 watts nominal, 1,800 watts peak (does not include power consumption for payloads) |

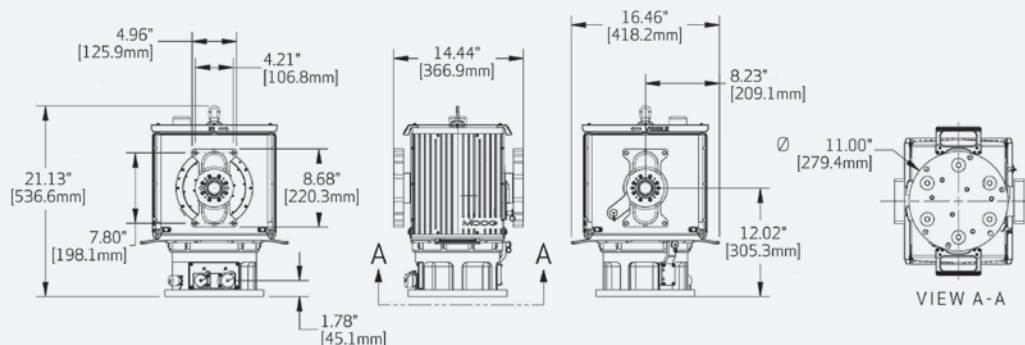
ENVIRONMENTAL SPECIFICATIONS

| Features | Specifications |
|-----------------------|-----------------------------------|
| Operating temperature | -40° to +70°C (-40° to +158°F) |
| Storage temperature | -40° to +70°C (-40° to +158°F) |
| Ratings | MIL-STD-810G IP66 |

AVAILABLE OPTIONS

| Features | Specifications |
|-------------------|---|
| Packaged payloads | EO/IR cameras, laser range finder, illuminator, etc. |
| Payload structure | L brackets and/or top U bracket, custom structure |
| Video tracking | Moog Series 8000 video tracker |
| Stabilization | INS with north/level pointing, IMU integration with system platform sensor |
| Precision level | Inclinometer mounted above azimuth |
| Additional I/O | Up to 4 additional 10Gb+ data channels fiber to payload(s) |

ARCHITECTURAL AND DIMENSIONAL DRAWING



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Equipment described herein falls under the jurisdiction of the EAR and may require US Government Authorization for export purposes. Diversion contrary to US law is prohibited.

If equipped with an automatic video tracker card this product is subject to export control laws and regulations of the United States government and fall under the control jurisdiction of ITAR regulations. Please contact our company export representative at +1-716-687-4930 for additional export information.

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