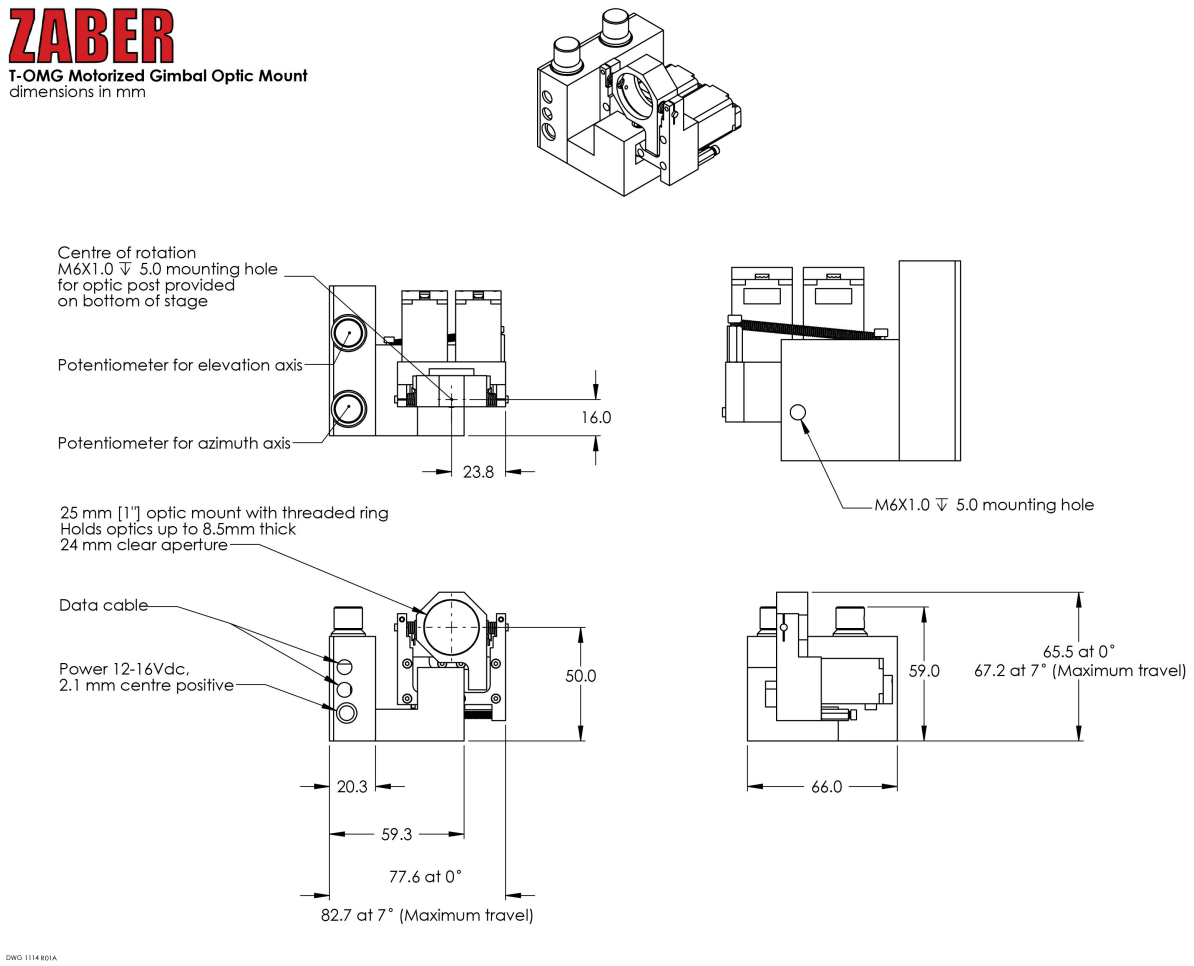
T-OMG Series Datasheet



- Two-axis gimbal mount with +/- 7 deg range
- Holds 1" (25 mm) optics
- Built-in controller; daisy-chains data and power with other T-Series products
- Our most compact optical mount weighing only 350 grams

The T-OMG is a high resolution, computer-controlled, two-axis optic mount. It is a stand-alone unit requiring only a 15 V power supply. Two built-in controllers allow for easy, independent manipulation of each axis of rotation.

Drawings



Specifications

Specification	Value	Alternate Unit
Built-in Controller	Yes	
Range	+/- 7 °	
Communication Interface	RS-232	
Communication Protocol	Zaber Binary	
Aperture Diameter	24 mm	0.945 "
Maximum Current Draw	700 mA	
Power Supply	12-16 VDC VDC	
Power Plug	2.1 mm center positive	
Motor Steps Per Rev	200	
Motor Type	Stepper (2 phase)	
Inductance	1.5 mH/phase	
Default Resolution	1/64 of a step	
Data Cable Connection	Minidin 6	
Motor Frame Size	NEMA 08	
Mechanical Drive System	Precision lead screw	
Limit or Home Sensing	Magnetic hall sensor	
Manual Control	Yes, Potentiometer	
Axes of Motion	2	
LED Indicators	Yes, Bi-colour	
Mounting Interface	M6 threaded hole for optic post	
Optic Mounting Interface	1" or 25 mm optics	
Vacuum Compatible	No	
Operating Temperature Range	0 to 50 °C	
RoHS Compliant	Yes	
CE Compliant	Yes	
Weight	0.33 kg	0.728 lb

Specification	Value	Alternate Unit
Microstep Size (Default Resolution)	0.000115378 °	2.014 µrad

Specification	Value	Alternate Unit
Accuracy (unidirectional)	0.055 °	0.959750 mrad
Repeatability	< 0.007 °	< 0.122 mrad
Backlash	< 0.005 °	< 0.087 mrad
Maximum Speed	11 °/s	1.8 rpm
Minimum Speed	0.00054 °/s	9.425 µrad/s
Speed Resolution	0.00054 °/s	
Encoder Type	None	
Angular Motion Per Motor Rev	1.4768384 °	

Specification	Value	Alternate Unit
Microstep Size (Default Resolution)	0.000057689 °	1.007 µrad
Accuracy (unidirectional)	0.0275 °	0.479875 mrad
Repeatability	< 0.004 °	< 0.070 mrad
Backlash	< 0.0025 °	< 0.044 mrad
Maximum Speed	7 °/s	1.2 rpm
Minimum Speed	0.00027 °/s	4.712 µrad/s
Speed Resolution	0.00027 °/s	
Encoder Type	None	
Angular Motion Per Motor Rev	0.7384192 °	