

## Electronically tunable Moiré lens MIE-20-1064



Optical power of the diffractive lens can be tuned electronically.

### Optical specifications:

Design wavelength	1064	nm
Focal tuning length	-75 to infinity to +75	mm
Optical power tuning range	-13.2 to +13.2	Dpt.
Substrate	Fused silica	
Polarization	preserving	
Lens type	convex to concave	
AR coating	1064	nm

### Mechanical specifications:

Length	98	mm
Width	73	mm
Height	38	mm
Mass	250	g
Clear aperture	20	mm

### Operational specifications:

Temperature	15 to 40	°C
Humidity	< 80 (at 31°C)	%R.H.
Maximum altitude	2000	m

### Performance:

Travel	360	°
Maximum speed	430	°/s
Bidirectional repeatability	0.05	°
Homing repeatability	0.25	°
Bidirectional accuracy	0.4	°
Backlash	0.013	°
Encoder resolution	143360	counts/rev
(Relative magnetic encoder)	0.0025	°/count
Minimum incremental motion	0.002	°
Minimum holding torque	0.01	Nm
Axis wobble	0.014	°
Maximum total load	50	g
Minimum lifetime	> 600000	revolutions

**Electrical specifications:**

Motor type	Elliptec resonant piezo	
DC voltage input	4.5 to 5.5	V
Typical current consumption (during movement)	800	mA
Typical current consumption (during standby)	50	mA

**Communications:**

Bus	Multi-Drop 3.3 V/5 V TTL RS232	
Connector on rotation stage board	Picoflex®	
Connectors on interface board	Picoflex®, Micro USB, DC Jack [6.3mm OD (GND), 2.1mm ID (+5V)]	
Speed	9600	baud
Data length (1 stop bit, no parity)	8	bit
Protocol data format	ASCII HEX	
Module address and command format	Mnemonic character	

