

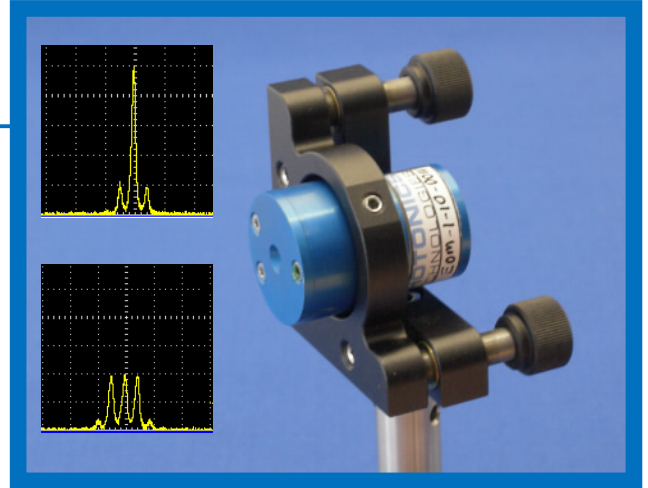


Electro-Optic Modulator

EOM-01-xx-yy

APPLICATIONS

Generation of side-bands on single-frequency lasers for high resolution locking techniques, such as frequency modulation saturation spectroscopy or stabilization to an optical resonator.



DESCRIPTION

This low-cost EOM is available as standard at 10 MHz, with other frequencies possible on request. It is the perfect solution for researchers wishing to stabilise single-frequency lasers by modulating a probe beam in a Frequency Modulation spectroscopy set-up, while leaving the main beam unaffected. The EOM can be mounted in a standard 1" mirror mount.

The unit may be supplied with a suitable optional low-voltage oscillator. Coatings for different wavelength ranges are available.

SPECIFICATIONS EOM-01

Resonant Frequency (xx MHz)	10, 12.5, 15, 20 (choose)
A.R. Coated (yy = λ range)	U = 400nm-700nm V = 650nm-1000nm IR = 1100nm-1500nm
Aperture Diameter	3 mm
Crystal Material	Lithium Niobate
Crystal Flatness	Lambda/10
SWR at resonance	<1.2:1 (10MHz)
Impedance at resonance	50 Ω (10MHz)
Modulation Bandwidth	600kHz (-3dB) typical
Diameter	25.4 mm (1")
Length	35 mm

OPTIONAL DRIVER

Manufacturer	Thurlby Thandar
Model	TG120
Description	Function Generator
Frequency	0.2Hz to 20MHz
Output Voltage	10mV to 20V (pk-pk)