



Commercial Fast Steering Mirror

CMM Optics's Commercial Fast Steering Mirror is a flexure-mounted system offering a compact, lowcost solution for single- and dualaxis scanning, beam alignment and beam stabilization applications. The compact package is available with mirror sizes ranging from 15 mm to 35 mm in diameter and mechanical angular deflection of ± 3 degrees.

A built-in, high-precision optical sensor monitors the angle of the mirror, while voice coil actuators allow for a faster response. The mirror is available with specialized materials and coatings for specific customer needs and optional digital or analog user interfaces.

CMM Optic designs and manufactures a portfolio of high-performance electrooptical infrared (EO/IR) optical systems and components that provide our customers the clarity, accuracy and reliability to capture the shot that matters and successfully complete their mission.

FEATURES

- Mirrors range from 15mm to 35mm in diameter
- Mechanical angular deflection of ± 3 degrees
- Built-in, high-precision optical sensor monitors mirror angle
- Mirror material and coating per customer's requirements
- Digital and analog interface between user and mirror
- Voice coil actuators for fast response



Fast Steering Mirror

ELECTRICAL SPECIFICATIONS

Angular Resolution	2 μ -radian
Frequency Bandwidth	300 Hz for small signal input (-3dB)
Step Response (small)	< 5 ms
Closed-Loop Linearity	< 1.0%
Repeatability	< 25 μ -radian
Accuracy	100 μ -radian

MECHANICAL SPECIFICATIONS

Type	Voice Coil
Size	2" x 2" x 2.98"
Weight	0.55 lbs
Range (Mechanical)	$\pm 3^\circ$
Sensor Type	Analog

MIRROR SPECIFICATIONS

Size	25.4 mm
Clear Aperture	23 mm
Material	Glass, Aluminum
Reflectance	> 95%
Wavelength	Customer Specification
Surface Flatness	1/8 wave @ 633 nm

6.2020-R1

CMM Optic
2909 Waterview Drive
Rochester Hills, MI 48309

Sales Contact: tvette@cmmp optic.com
(248) 293-2900
www.cmmp optic.com