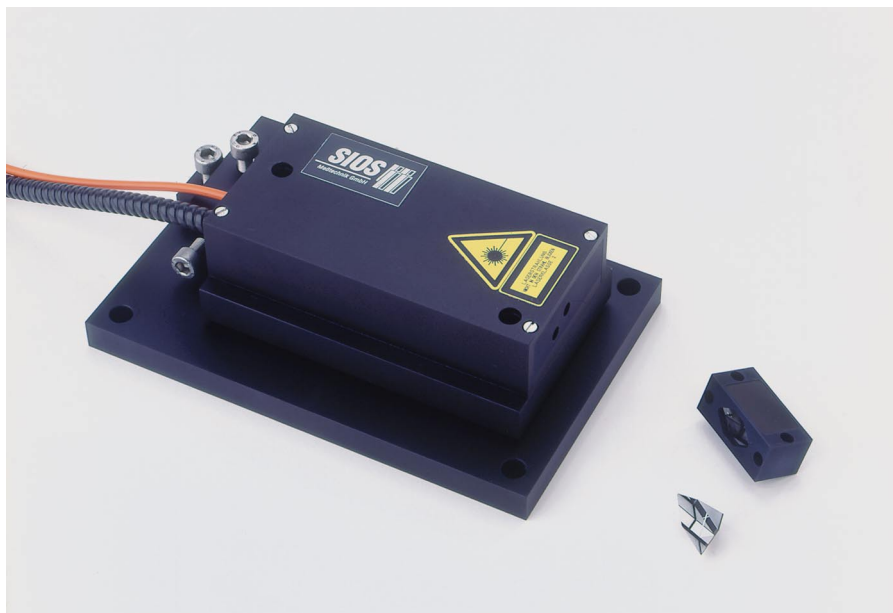


MI-series Miniature Retroreflector interferometers



The MI series systems are miniature interferometers equipped with triple-faceted retroreflectors for precision length measurement and are designed for incorporation into customer-supplied equipment, and are readily adapted to a wide variety of experimental set-ups and tasks. The miniaturised sensor head and triple-faceted retroreflector allows their employment as permanently installed metrology systems.

The fibre optic coupled sensor head provides major benefits in many types of applications and makes overall metrological systems more versatile.

The miniature interferometer converts the motion of the triple-faceted retroreflector along the beam axis into optical-interference signals that are transmitted to the optoelectronic signal processing/power supply unit for processing and output as length.

The HeNe laser (which is frequency stabilised on models with large dynamic ranges) is stabilised against environmental changes and forms the basis for the high metric precision. The systems themselves are free from linearity errors.

Instrument operation and display of the measurement results may be via either a separate keypad/display unit or a PC running an optional software package.

Applications:

- Precision laser-interferometric length-measurement instruments for incorporation into single/multi-axis translation stages, microscope stages, machine tools or positioning systems.
- Positioning single/multi-axis machine beds.
- Calibrating machine tools or co-ordinate measurement machines.
- Angular measurements.
- Handling precision length-measurement tasks in research and development work.

