

**CW and pulsed laser sources**

**Range finders**

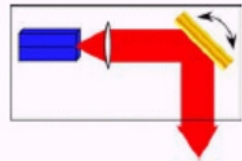
**Profile detectors**

**Nanometric displacement sensors**

**Planarity measuring systems**

**Interferometric roughness sensors**

**Custom laser sensors**



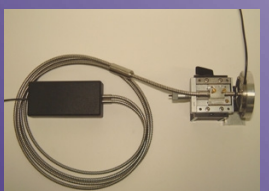
## Laser sources

Marwan Technology provides both Littrow-mounted extended cavity diode lasers and pulsed Nd:YAG lasers. We also supply optics and accessories for high-energy pulsed lasers.



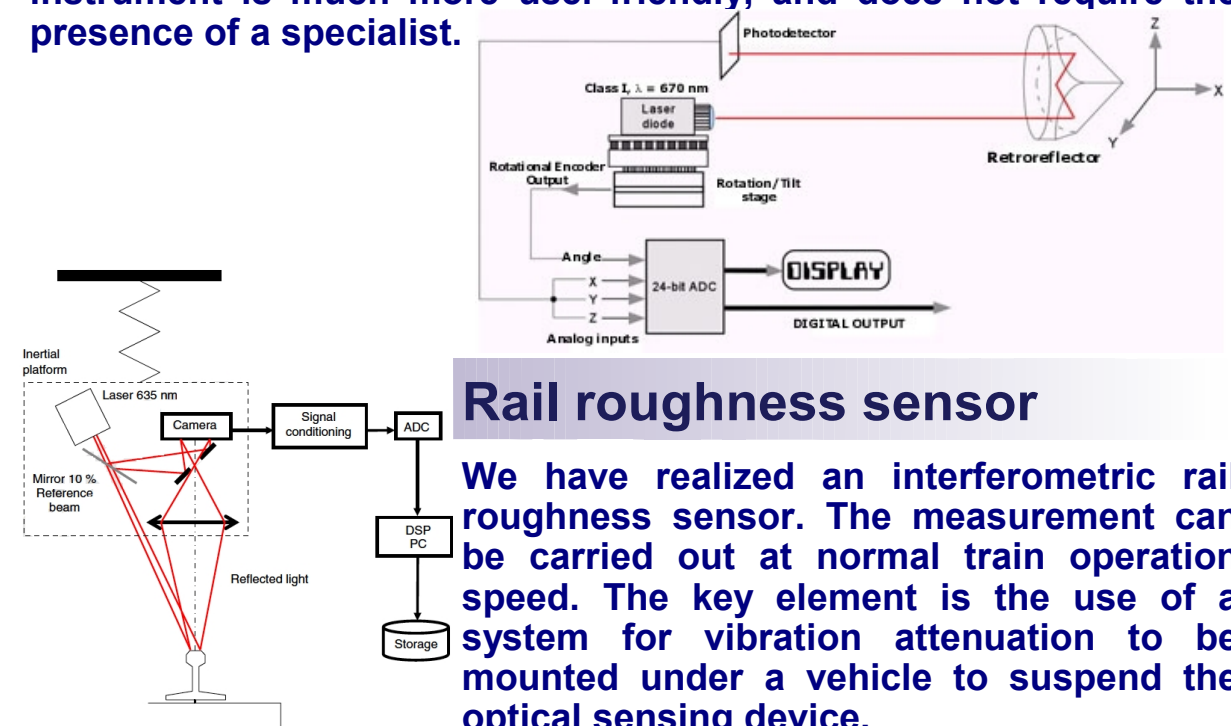
## Nanometric displacement sensor

NM-01 detects nanometric displacements or oscillations. The laser radiation is delivered through an optical fiber bundle. The fiber can stand both cryogenic and very high temperatures. Typical applications include surface inspection (DC operation) and analysis of elastic properties of materials (AC operation).



## Planarity measuring system

PLM is a compact planarity measuring system for ways of turning and milling machines. Compared to inductive levels our planarity measuring system is much more accurate. Compared to Doppler-based and/or Michelson-Interferometer-based devices our instrument is much more user-friendly, and does not require the presence of a specialist.



## Rail roughness sensor

We have realized an interferometric rail roughness sensor. The measurement can be carried out at normal train operation speed. The key element is the use of a system for vibration attenuation to be mounted under a vehicle to suspend the optical sensing device.

## Custom laser sensors

Marwan staff will design and realize custom laser sensors and measuring system for specific applications. Examples of past achievements include: customized shade sensors and range finders for different industrial processes, on-line wetness and color sensors for food industry.

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Marwan Technology provides laser technology



**MARWAN TECHNOLOGY**

**SPIN-OFF OF PISA UNIVERSITY**

**Laser sources,  
laser sensors &  
measuring systems**

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