

LICENSING OPPORTUNITY

THE SMART MIRROR

THE TECHNOLOGY

U.S. Patent Number 10,234,309

The Smart Mirror is a device that accurately measures the power of laser sources without disturbing the laser beam. This is a promising technology for accurate monitoring of output power in industrial lasers that allows power measurement during the laser's performance of its routine operations. Such high-accuracy, non-exclusive power monitoring has not been previously possible. The novelty is in a radically different approach where the laser power is determined by measuring the force of the light as it reflects from a mirror. This device operates across a power range of 25W to 500W.

SMALLER

FASTER

HIGHLY ACCURATE

This device is a miniaturized (less than 5 cm on a side), mirrored, force sensor that combines several key elements to make the sensor smaller, faster, and more sensitive to force

The design overcomes the limitations of allowing simultaneous power measurement during laser use.

The non-thermal approach of the Smart Mirror reduces measurement time, which allows for better sensing of rapid changes in laser power.

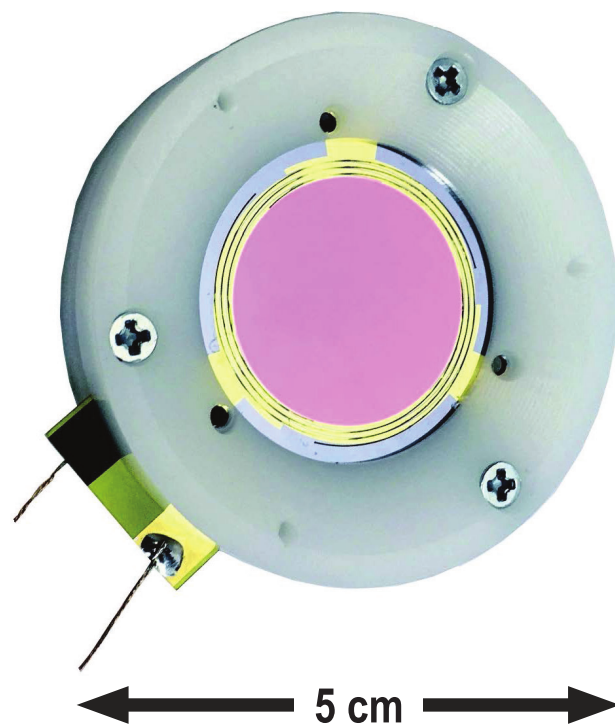
BENEFITS

Highly accurate measurements that can be made in real time

Small, robust package for use on factory floor

Can be calibrated in-house using standard reference masses

Does not absorb laser light



Photograph of a mounted pair of springs with high reflectivity mirror designed for 1070 nm laser incident at 45 degrees.

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