THE TECHNOLOGY

This advanced radiometer is composed of a substrate, a radiation absorber placed on the substrate to absorb radiation, a thermal component placed on the substrate to change electrical resistance in response to a change in temperature of the radiometer, and a thermal link to connect the radiometer to a thermal reference. The NIST radiometer is designed to absorb approximately 100% incident optical power using vertically aligned carbon nanotubes – the most ideal absorber – to accurately measure optical power.

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ADVANCED ABSORBENT EFFICIENT

The NIST radiometer, the most advanced technology to date in measuring optical power, can give accurate measurements with the following benefits:

- Non-bulky and does not require many individual components to craft
- Is optimal for detecting transient optical signatures
- Is not limited in reading conical surfaces

BENEFITS

- Wide variety of usages including optical power meters
- Useful in an imaging array, a broadband (multispectral) sensor, or a multi-element trap radiometer
- Is a thermal detector for optical radiation, including infrared radiation
- Can be electrically connected or optically connected to various devices

CONTACT

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