

# LICENSING OPPORTUNITY: A SUPER ACCURATE TEMPERATURE SENSOR THAT WORKS WITHOUT ELECTRICITY

## DESCRIPTION

### Problem

Traditional thermometers often struggle with accuracy in harsh conditions, such as extreme heat or electromagnetic interference. Many electronic temperature sensors degrade over time, leading to inconsistent readings. This invention eliminates the need for electrical components, reducing the risk of failure in challenging environments. It also enhances measurement precision, making it ideal for applications where accuracy is critical. The photonic thermometer provides a more stable and long-lasting solution compared to conventional methods.

### Invention

This invention introduces a photonic thermometer that uses optical fibers to measure temperature. The thermometer is designed with a sheath and module assembly to enhance accuracy and durability. It leverages photonic technology to provide precise temperature readings without relying on traditional electronic sensors. The design aims to improve reliability in extreme environments. This innovation could be particularly useful in industries requiring high-precision temperature monitoring.

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## BENEFITS

### Potential Commercial Applications

This technology can be applied in industrial manufacturing, where precise temperature control is essential. It is also useful in medical devices, ensuring accurate temperature monitoring in sensitive procedures. The aerospace industry could benefit from its ability to function in extreme conditions. Energy production facilities, such as nuclear plants, may use it for reliable temperature tracking. Additionally, it could be integrated into scientific research equipment requiring high-precision thermal measurements.

### Competitive Advantage

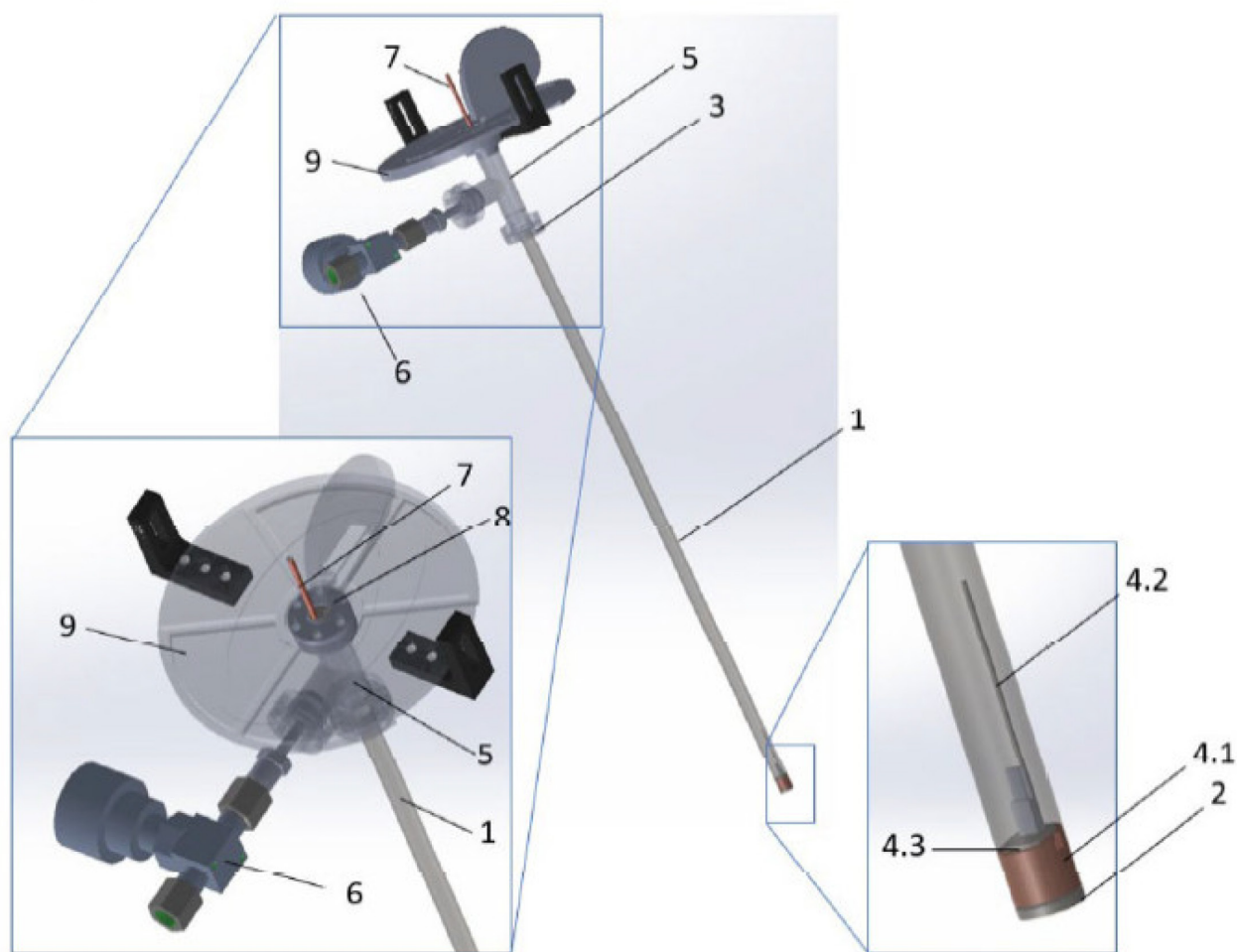
The photonic thermometer offers higher accuracy than traditional electronic sensors. It is more durable in extreme environments, reducing maintenance costs. The lack of electrical components makes it immune to electromagnetic interference, a common issue in industrial settings. Its long lifespan ensures consistent performance over time. Compared to conventional thermometers, it provides greater reliability and precision.

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Packaging assembly with all modules.

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