

# **Infrared temperature measurement on solar thermal high temperature receivers**

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## **Abstract**

Operation of solar thermal receivers requires an accurate knowledge of the temperature distribution at the absorber. However, concentrated solar radiation makes it difficult to determine the temperature on irradiated surfaces. Contact thermometry is not appropriate for the use under concentrated solar radiation and also pyrometry fails when external light sources interfere significantly. To avoid distortion of the temperature reading the measurement has to be performed in a spectral range where the emitted thermal radiation exceeds the reflected solar radiation by a multiple. The paper describes the methods of solar blind pyrometric temperature measurement on solar thermal high temperature receivers.

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