

NON CONTACT MEASUREMENT DESIGN SYSTEM DESIGN

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ABSTRACT

A non-contact temperature measurement system has been designed. The temperature measurement is based on the measurement of the infrared light intensity distribution emitted by the measuring object. The infrared file is passed through a diffraction grating and is subsequently captured by an infrared camera. The infrared image is then processed using Matlab to obtain the infrared spectrum. Under Stephan-Boltzmann's law and Wien's shift laws can be determined the temperature of objects emitting infrared radiation

Kata Kunci: *infrared spectrum, Stefan-Boltzmann's law, Wien's shifting law, temperature*