

# Abstract for Qirt Asia 2017 in South Korea

## Title 2

Presenter:

Dr. Sven-A. Wode  
Business Develop Manager  
InfraTec GmbH  
Germany

Title of presentation: Active spatial resolution enhancement for cooled IR cameras.

Typically spatial resolution (iFOV) of (IR) cameras with a given FPA size (in terms of pixels) can be influenced by using macroscopic and microscopic lenses. With such a solution the overall field of view (FOV) will be reduced by nature. To achieve both small iFOV and large FOV at the same time an FPA detector with a higher amount of pixels usually is needed. This solution depends on the general availability of such detectors and most probably it will result in a more expensive solution.

This paper describes an opto-mechanical solution which increases the iFOV still keeping the FOV of a given FPA detector. The gain of spatial resolution will be presented with examples as well as the possible influence of such enhancement to other performance data of the system. The realization of the opto-mechanical resolution enhancement will be presented as a reliable and an affordable alternative to usually expensive solutions.

Headquarters

InfraTec GmbH  
Infrarotsensorik und Messtechnik  
Gostritzer Straße 61 – 63  
01217 Dresden / GERMANY

Phone +49 351 871-8630  
Fax +49 351 871-8627  
E-mail thermo@InfraTec.de  
[www.InfraTec.eu](http://www.InfraTec.eu)

USA office

InfraTec infrared LLC  
5048 Tennyson Pkwy.  
Plano TX 75024 / USA

Phone +1 844-226-3722 (toll free)  
E-mail thermo@InfraTec-infrared.com  
[www.InfraTec-infrared.com](http://www.InfraTec-infrared.com)