

## Novel Sensor Systems for Future Applications using UAVs

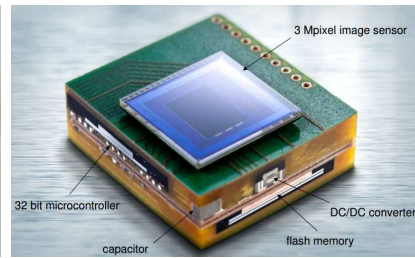
Demonstration & Presentation | 15 October 2016, Berlin



Panoramic stitching of a drone flight path



Aminiature RADAR sensor in W-Band



Integrated camera system

UAV's, specifically drones, have seen in the recent past a tremendous growth in acceptance and use cases, mostly due to the fact of their improved availability, increase ease of use and interoperability with specific sensors. As of today, the majority of applications are dedicated to optical inspections, be it as simple as wireless camera systems for FPV and visual defect identification to thermal and hyperspectral imaging. Albeit these (hyper)visual sensors have already opened up a vast field of applications, like bridge or windmill inspection, thermal insulation verification and crop growth analysis, the use cases for drones are way from being exhausted.

Novel sensor, powerful microcomputers and integrated analysis software allow to match position and sensor data to a multi-domain mapping, offering a high degree of autonomy to future drone usage scenarios. Among these sensors, we can see miniaturized radar and ultrasonic sensor, improved (and smaller, more lightweight) hyperspectral image sensors, detectors for air condition and quality and hazardous substances (CBRN) and a range of other non-visual sensors, which allow for an extremely mobile deployment of inspection and analysis methods right now unachievable with conventional means.

Our workshop at DRONE Berlin will give insight in current developments of sensors, energy supply concepts and suitable sensor fusion methods which will enable future use cases for a much broader application of drone usage.

- For more information, please visit <http://www.izm.fraunhofer.de>
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The program are subject to change without prior notice.  
Please refer to our on-site instructions.




# Novel Sensor Systems for Future Applications using UAVs

Presented by Fraunhofer IZM, Germany

**DRONE**BERLIN

WORKSHOP  
15 October 2016, Berlin

## Free Seat Reservation Form (Please return this form to [program@drone-berlin.de](mailto:program@drone-berlin.de))

Ansprechpartner/Person to contact <input type="checkbox"/> Frau/Ms. <input type="checkbox"/> Herr/Mr.		
E-mail	Homepage	
Firma/Company		
Strasse/Street	Telephone	
PLZ/Postal code	Ort/Town	Land/Country
Habt ihr Fragen zum Workshopprogramm?/Any questions regarding the workshop program?		

### Option: Get 8% off booth fee until 12 August 2016

As an added benefit to registering for this workshop, we're sponsoring a discount of 8% on booth fee until August 12th (can not be combined with any other offers).

I am interested in exhibiting, please send me details.

#### Spaces are limited and on a first come first serve basis!

- This is a free workshop but seats are limited. Your pre-registration will help us plan a better workshop!
- Please complete one form per person. If you need to book for more than one person, you may submit the form more than once.
- The organizers reserve the right to refuse late registrants due to limited capabilities.
- To cancel your seat reservation, please email [program@drone-berlin.de](mailto:program@drone-berlin.de) with your full name, email address, and phone number.

Place, Date

Signature