

IMAGING

Tech Pulse



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Imaging Tech Pulse is a special edition newsletter from Photonics Media and DRS Technologies covering key developments in imaging technology.

sponsor



X-Ray Camera Solutions



For IR Imaging, Better SWaP Beckons

For military and surveillance applications, IR imaging is all about SWaP: size, weight and power. There's also another letter to consider: C, for cost.

Take, for example, an airborne drone. The smaller the SWaP, the smaller the drone can be, and the longer an aircraft can stay aloft. As for the cost, the lower it is, the easier it is to equip an unmanned aerial vehicle (UAV) with an IR imager.



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PROMOTED CONTENT



DRS Technologies, Inc., Commercial Infrared Systems

Discover the Truth About Range Data

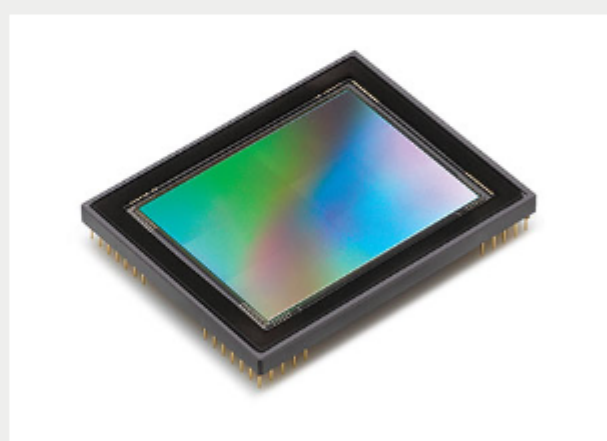
Security Systems Integrators know that effective site design comes down the level of fidelity in the camera range performance data. The industry is flooded with conflicting information when it comes to range performance. Accurately gauging range performance from the onset of the site design may allow one to avoid unintended, and pricey rework costs later. Download "The Truth About Range Data" whitepaper from DRS Technologies to learn more.



[Download White Paper](#)

CCD Sensors Remain Competitive with Broadening Appeal

CCDs continue to be the sensor of choice for applications such as astronomy and spectroscopy. With future investment, we can expect improvements in sensor architecture, resolution, pixel size and depth, as well as readout speeds.

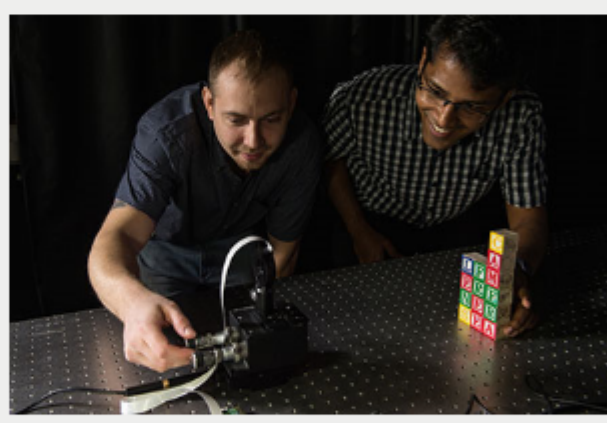


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Lensless Camera Thinner than a Dime

Using a gridlike mask rather than a lens, FlatCam detects a linear combination of light from multiple scene elements and uses an algorithm to convert the data into images and videos. Prototypes that operate at visible and IR wavelengths were developed at Rice University.

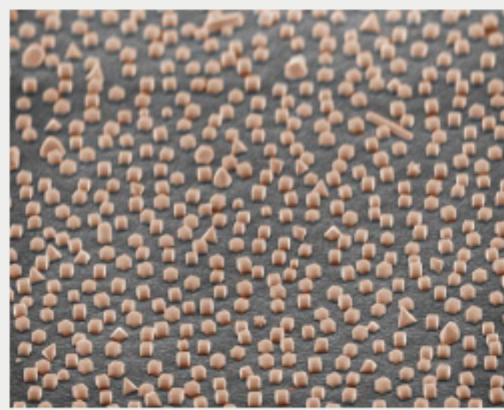


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Plasmonic Absorbers Capture Specific Wavelengths

The technique could allow advanced thermal imaging systems to be produced more quickly and inexpensively and with higher sensitivity. It holds potential for a variety of other applications, such as masking heat signatures, and is easily scalable, can be applied to any surface geometry and costs less than current light-absorption technologies.

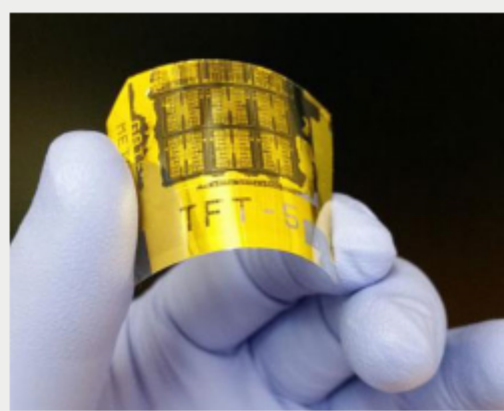


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Record-Setting Phototransistor is Flexible and Sensitive

Inspired by mammals' eyes, a record-setting phototransistor could improve the performance of myriad products — from digital cameras, night-vision goggles and smoke detectors to surveillance systems and satellites — that rely on electronic light sensors.



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