

# NEWS RELEASE

---

**Princeton Infrared Technologies, Inc.**

9 Deer Park Drive, Suite J-5  
Monmouth Junction, NJ 08852

Contact: Martin Ettenberg

Phone: +1 609-917-3380

E-mail: [Martin.Ettenberg@princetonirtech.com](mailto:Martin.Ettenberg@princetonirtech.com)

Web Site: [www.princetonirtech.com](http://www.princetonirtech.com)

**Media Contact: Marlene Moore**

Smith Miller Moore

Phone: 818-708-1704

Email: [Marlene@smithmillermoore.com](mailto:Marlene@smithmillermoore.com)

*For Immediate Release*

## **New SWIR Scientific Camera with Highest Frame Rates at Megapixel Resolution**

**Monmouth Junction, NJ – December 15, 2015 - Princeton Infrared Technologies, Inc. (PIRT)** ([www.princetonirtech.com](http://www.princetonirtech.com)), introduces the **1280SCICAM**, a revolutionary shortwave infrared (SWIR) camera that delivers the longest integration times and the highest frame rates at megapixel resolution, available on the market today. The lattice-matched indium gallium arsenide (InGaAs) sensor features 1280 x 1024 resolution at frame rates greater than 95 frames per second (fps) at full-frame size and operates in the visible to shortwave infrared spectrum from 0.4  $\mu\text{m}$  to 1.7  $\mu\text{m}$ . The camera's small 12-micron pitch, coupled with the low read noise ( $<30e^-$ ) and high quantum efficiency ( $> 75\%$  from 1.0 to 1.6 microns) of the imaging array, make the new camera ideal for scientific imaging tasks in the SWIR and visible wavelengths. Other applications include high-speed machine vision and long-range surveillance operations where the small pitch is especially important.



A 3-stage thermoelectric cooler (TEC) is integrated into a vacuum package to provide the **1280SCICAM** with three temperature setpoints for different conditions, 25 °C (no cooling), 0 °C (fan-cooled), and -50 °C (water-cooled). The on-board array has 14-bit digital output, snapshot exposure with no image lag, and features an unprecedented low read noise of  $<30e^-$  which is lower than any other cooled SWIR scientific camera currently available. Princeton IR Tech's advanced SWIR-InGaAs camera has a medium-base Camera Link<sup>®</sup> to support fast full-frame-rate imaging. The camera's high dynamic range ratio is greater than 3000:1, with integration times ranging from 50 microseconds to more than 3 minutes. The new 1280SCICAM is available with F- and C-mount lenses.

-more-

Princeton Infrared Technologies' new scientific camera is the first product to launch from the advanced InGaAs-shortwave infrared imaging technology company. Martin H. Ettenberg, Ph.D., CEO of Princeton Infrared Technologies, Inc., notes, "We built the new 1280SCICAM because we thought the scientific and machine vision SWIR imaging market was lacking a 1.3 megapixel resolution camera that had low noise and high frame rates without image lag while also allowing long integration times for low signal levels." For more information, please visit: [www.princetonirtech.com](http://www.princetonirtech.com).

**Princeton Infrared Technologies, Inc. (PIRT - [www.princetonirtech.com](http://www.princetonirtech.com))** - Specialists in indium gallium arsenide (InGaAs) imaging technology, PIRT focuses on design and manufacture of both shortwave infrared cameras, and one- and two-dimensional imaging arrays. All products are created in the company's fabless environment under strict testing and quality control guidelines, providing innovative and cost-effective detectors that image in the visible, near- and shortwave-infrared wavelengths. Application areas include spectroscopy for sorting materials, moisture detection, thermal imaging, night vision, and laser imaging for military, industrial, and commercial markets.

# # #