



QUANTUM EFFICIENCY CHARACTERIZATION SYSTEM



QUANTUM EFFICIENCY CHARACTERIZATION SYSTEM

1. QUANTUM EFFICIENCY Characterization System

This system analyze quantum efficiency (IPCE) characteristics of solar cells, photodiode, photodiodes and sensors as a function of wavelength.

The system contains the following elements:

I-V source meter

Quantum efficiency system

USA Spectral monochromator

Voltage range: -30 V to +30 V

Current range: 100 pA to 1 A

Measurement parameters:

Wavelength range: 250 nm- 1100 nm

- Electronic device cell probes for all devices
- 1 Laptop computer under Windows 7 or more



SYSTEM measures the followings

Photocurrent-wavelength ($I-\lambda$) measurements

External quantum efficiency (EQE or IPCE) -wavelength measurements

Photocurrent-time ($I-t$) under various wavelengths

OPTIONAL

Current-voltage ($I-V$) of the all electronic devices

Current-voltage ($I-V$) under various illuminations

Current-voltage ($I-V$) under various wavelengths

Photocurrent-time ($I-t$) under various illuminations

Photocurrent-time ($I-t$) under various wavelengths

Automatically analyze photoconduction mechanism analysis of photodiode, photosensor, solar cell

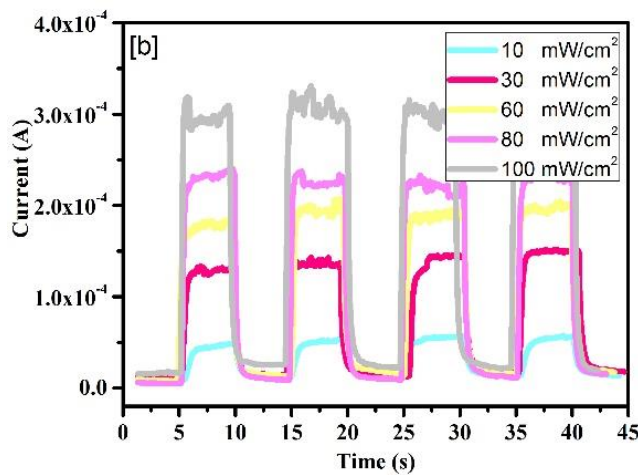
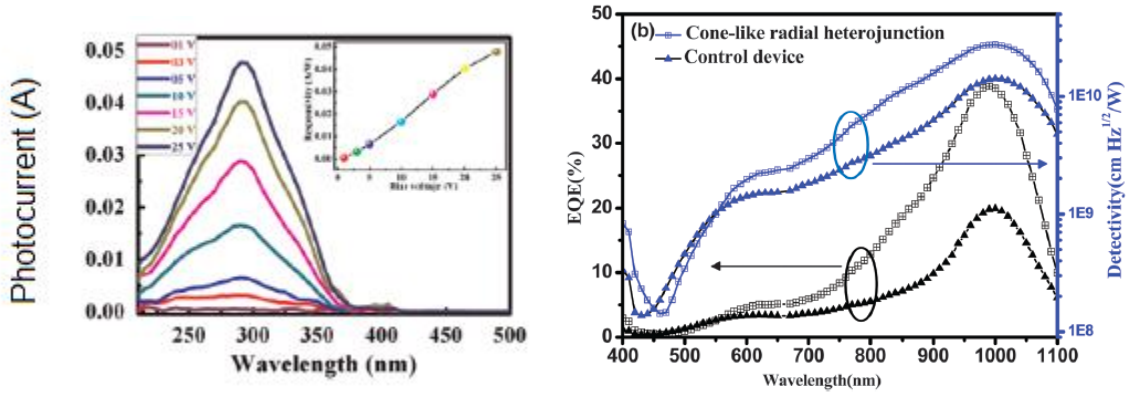
Automatically analyze photovoltaic mechanism analysis of photodiode, photosensor, solar cell

OPTOSENSE LLC.
1802 Alafaya Trail Suite 112
Orlando, FL 32826
407 360 84 84 / 407 360 84 85
www.optosenselab.com
www.optosenselab.co.uk



System analyze photocurrent as $I_{\text{phot}}-\lambda$ and $I_{\text{photo}}-\text{time}$ as

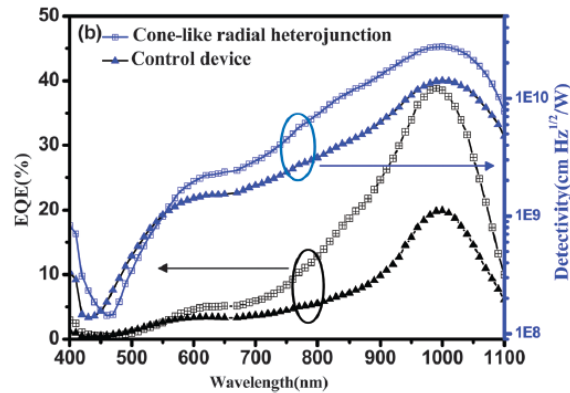
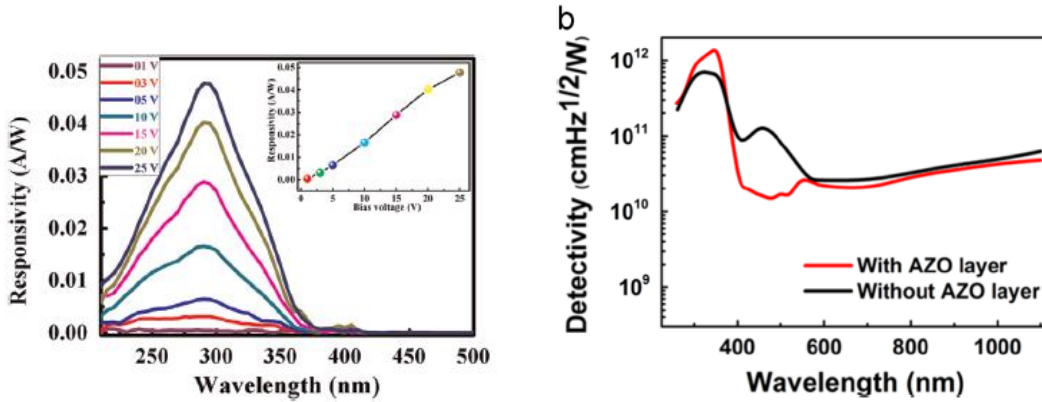
For example



OPTOSENSE LLC.
 1802 Alafaya Trail Suite 112
 Orlando, FL 32826
 407 360 84 84 / 407 360 84 85
www.optosenselab.com
www.optosenselab.co.uk



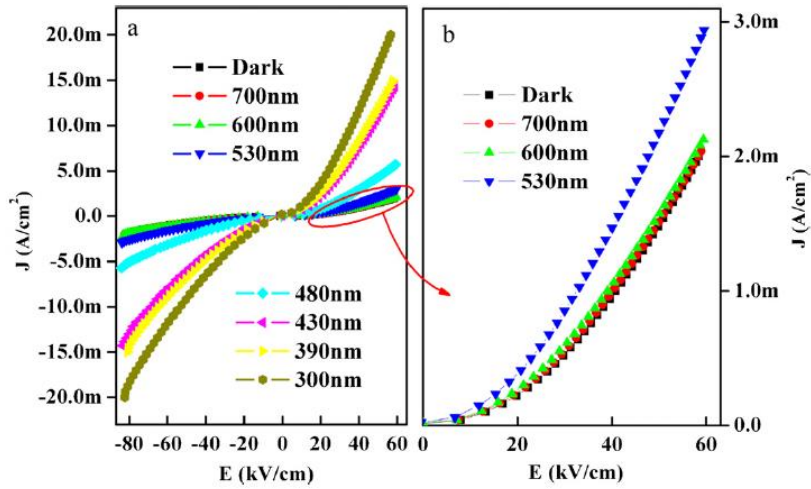
USER analyze photoresponsivity and detectivity and other all optical parameters.



OPTOSENSE LLC.
 1802 Alafaya Trail Suite 112
 Orlando, FL 32826
 407 360 84 84 / 407 360 84 85
www.optosenselab.com
www.optosenselab.co.uk



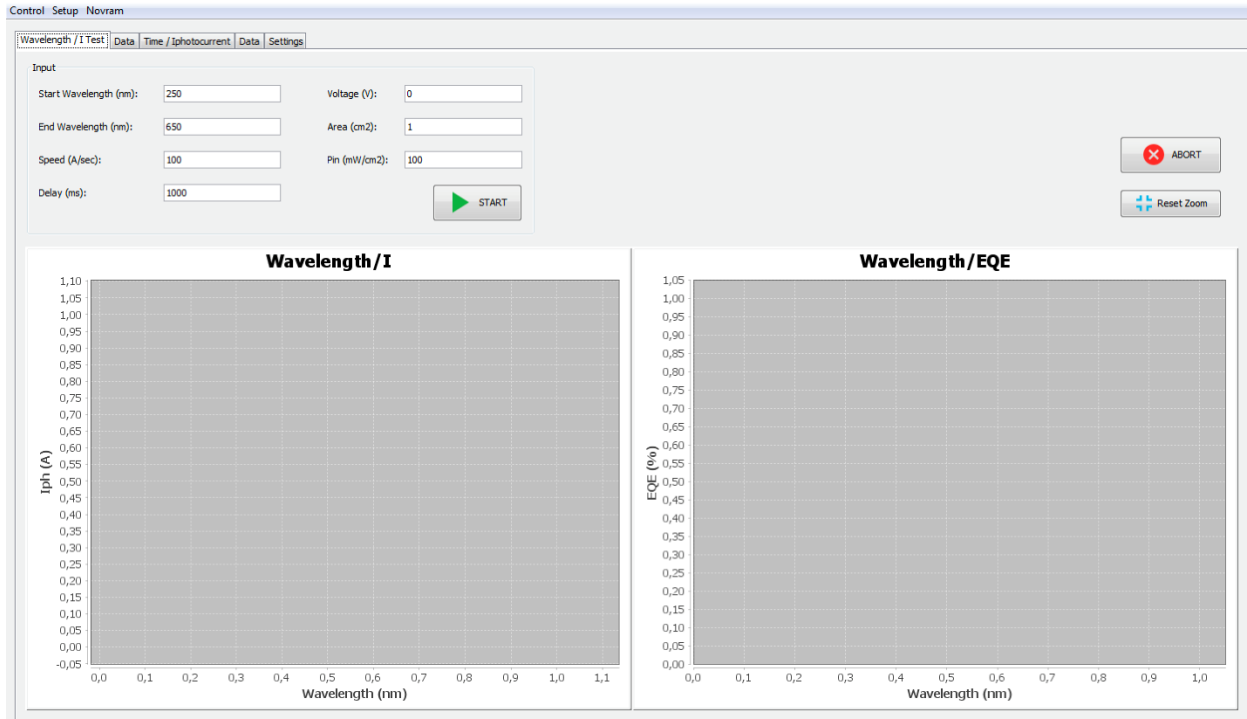
System analyze the I-V characteristics under various wavelength as



OPTOSENSE LLC.
1802 Alafaya Trail Suite 112
Orlando, FL 32826
407 360 84 84 / 407 360 84 85
www.optosenselab.com
www.optosenselab.co.uk



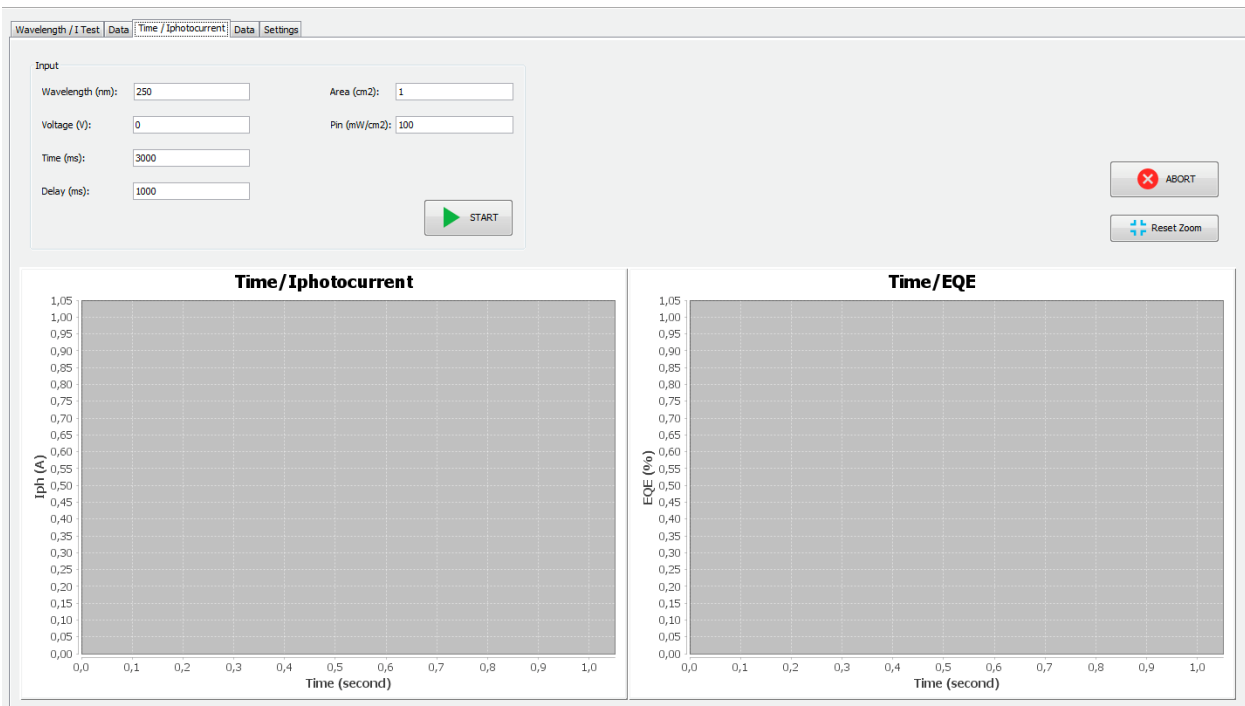
SOFTWARE -I



OPTOSENSE LLC.
1802 Alafaya Trail Suite 112
Orlando, FL 32826
407 360 84 84 / 407 360 84 85
www.optosenselab.com
www.optosenselab.co.uk



SOFTWARE -II



OPTOSENSE LLC.
1802 Alafaya Trail Suite 112
Orlando, FL 32826
407 360 84 84 / 407 360 84 85
www.optosenselab.com
www.optosenselab.co.uk