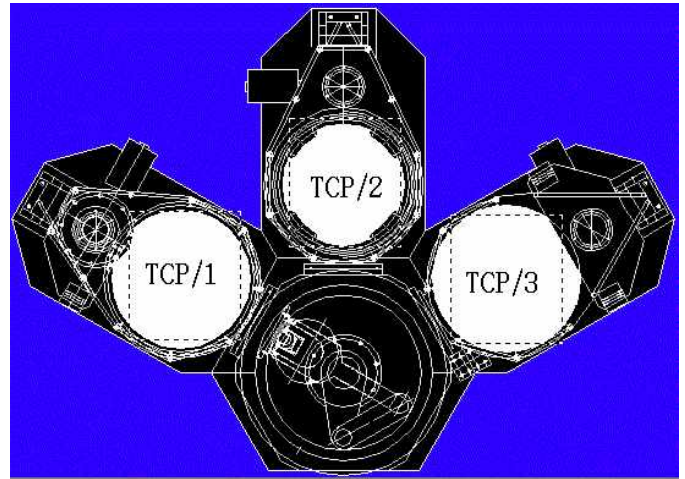


# ATS-CVD Series Cluster System for PECVD Silicon Layer



Schematic Diagram

## Special Features

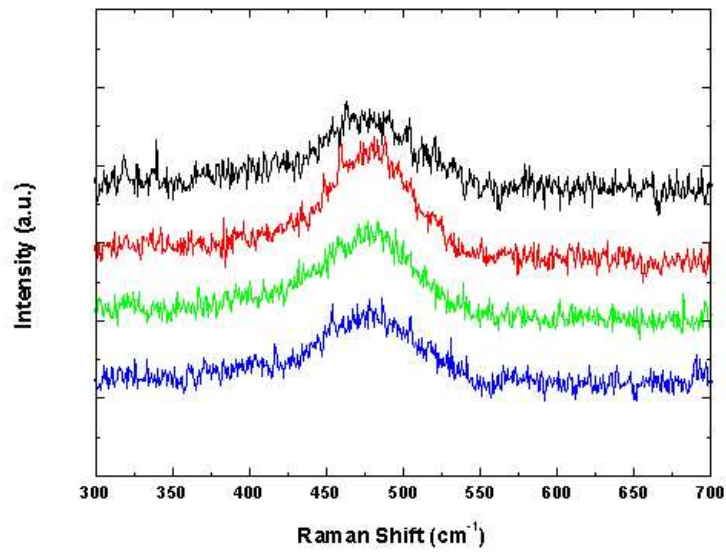
- ◆ High density PECVD system for a-Si:H and nc-Si:H layer
- ◆ Low temperature deposition of a-Si:H layer (under about 300°C)
- ◆ Robot transporting system
- ◆ Wafer capacity: 1 × 4"
- ◆ Average throughput  
Up to 5,000 wafers per year

## Specifications

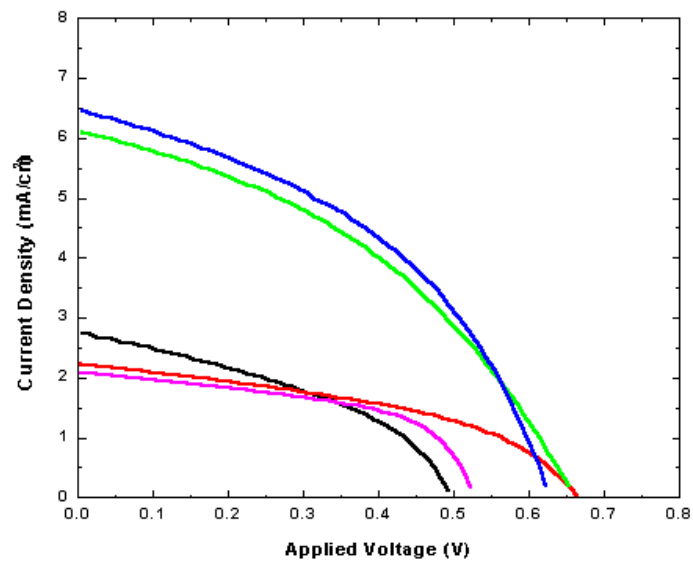
- ◆ Dimension  
2,100L × 1,700H × 1,300W (mm<sup>3</sup>)
- ◆ Others  
Power: AC 600W (13.56MHz)  
Gas : H<sub>2</sub>/SiH<sub>4</sub>/PH<sub>3</sub>/B<sub>2</sub>H<sub>6</sub>  
Heater : silicon carbide  
(heating rate: 40°C/min, max.  
temp.:850°C, deviation: negligible)  
Pump: rotary(600ℓ/min) & turbo(500ℓ/s)

## Applications

- ◆ Optical devices
- ◆ Barrier layer
- ◆ Solar cell

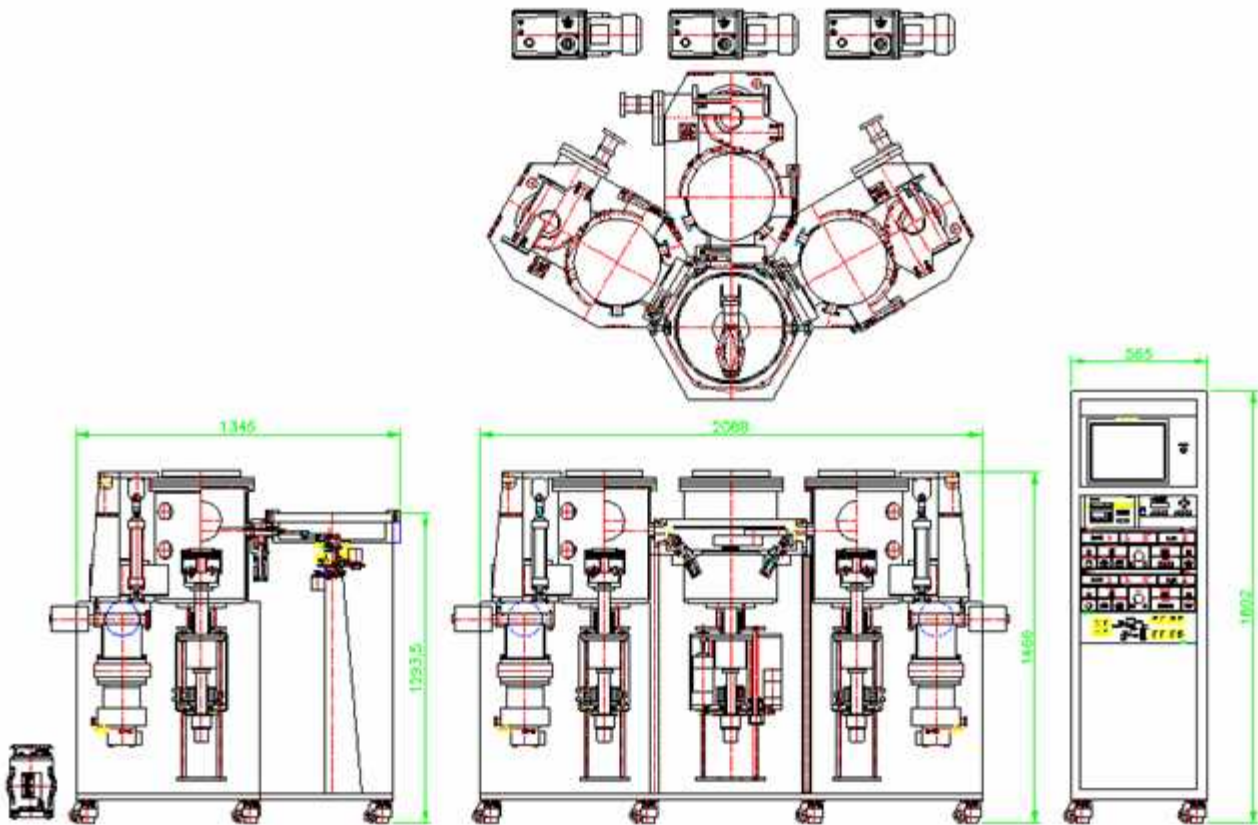


Raman shift of a-Si:H layer using PECVD



I-V characterization of solar cell using PECVD

Layout



175-25, Cheongcheon-Dong 2, Bupyeong-Gu,

Incheon, 403-853, Rep. Korea

Phone: +82-32-508-8060/8067

Fax: +82-32-508-8069

E-mail: [atech@atechsystem.co.kr](mailto:atech@atechsystem.co.kr)

Website: [www.atechsystem.co.kr](http://www.atechsystem.co.kr)