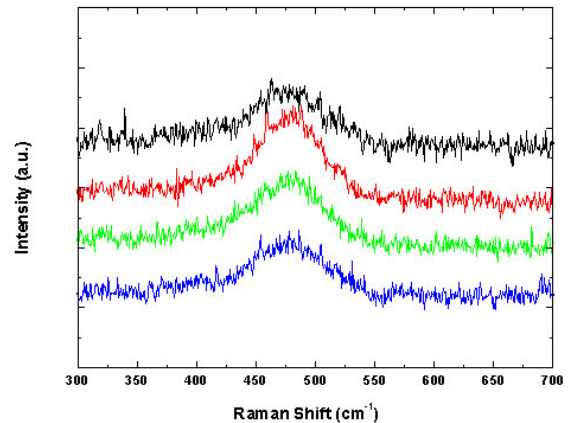


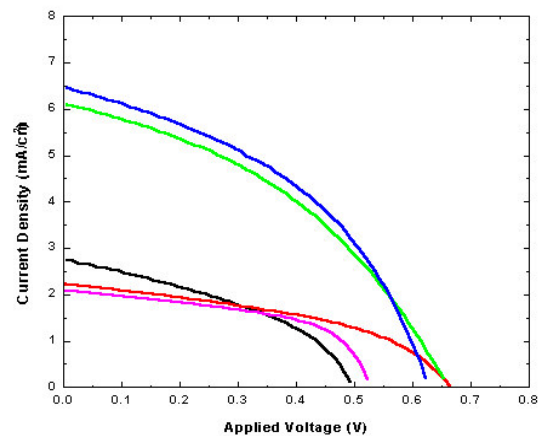
ATS-CVD Series Cluster System for PECVD Silicon Layer



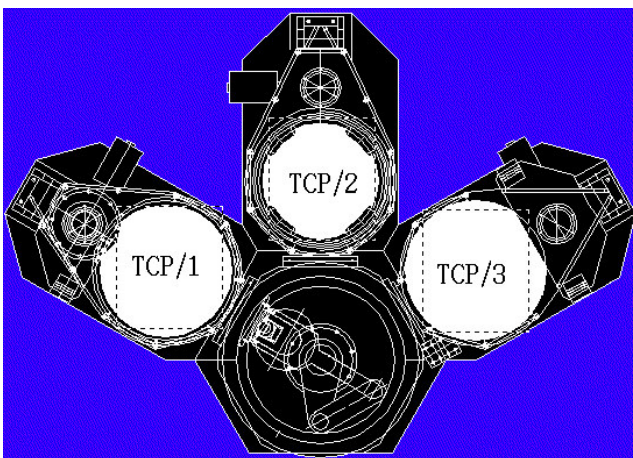
Raman shift of a-Si:H layer using PECVD



I-V characterization of solar cell using PECVD



Schematic Diagram



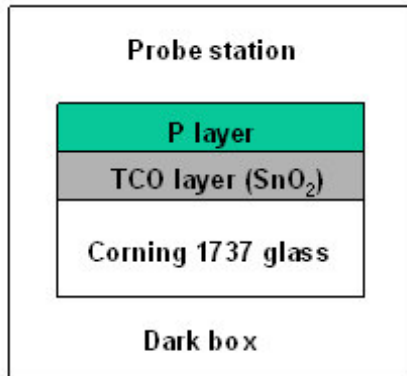
Special Features

- ◆ 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
- ◆ Applications
Optical devices

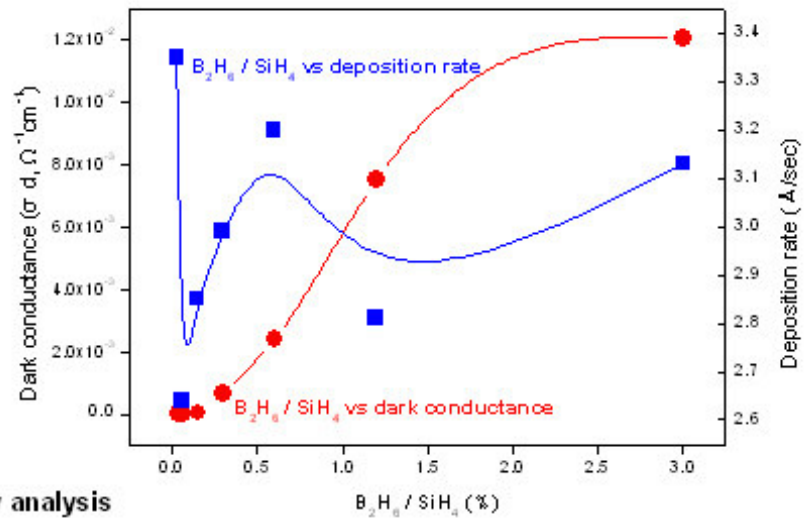
- ◆ Wafer capacity
1 × 4"
- ◆ Average throughput
Up to 5,000 wafers per year
- ◆ Dimension
600L × 1700H × 1300W (mm³)
- ◆ Others
Power: AC 600W (13.56MHz)
Gas : H₂/SiH₄/PH₃/B₂H₆
Heater : silicon carbide
(heating rate: 40°C/min, max. temp.:850°C, deviation: negligible)
Pump: rotary(600l/min) & turbo(500l/s)

◇ Real Data

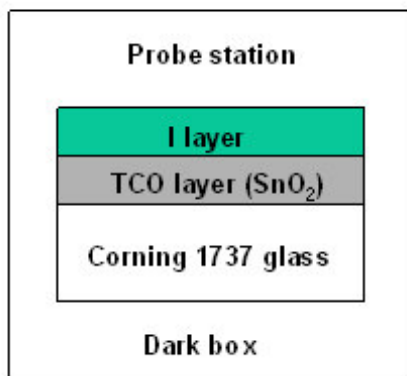
- p layer characteristics



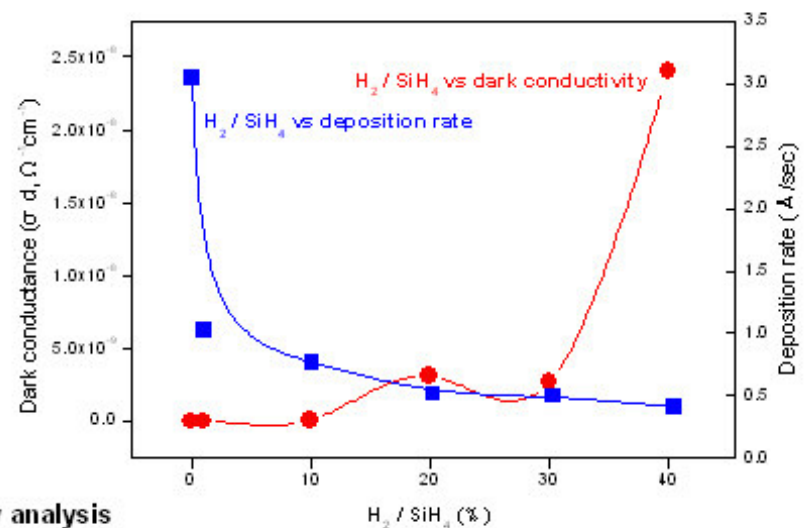
Schematic diagram of dark conductivity analysis



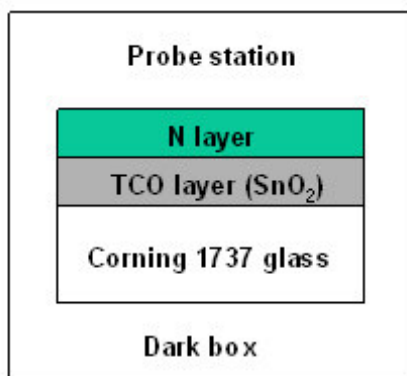
- i layer characteristics



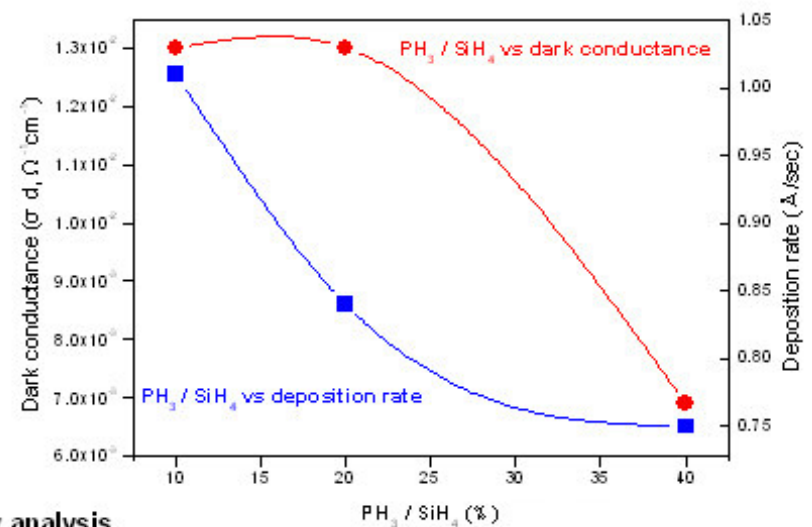
Schematic diagram of dark conductivity analysis



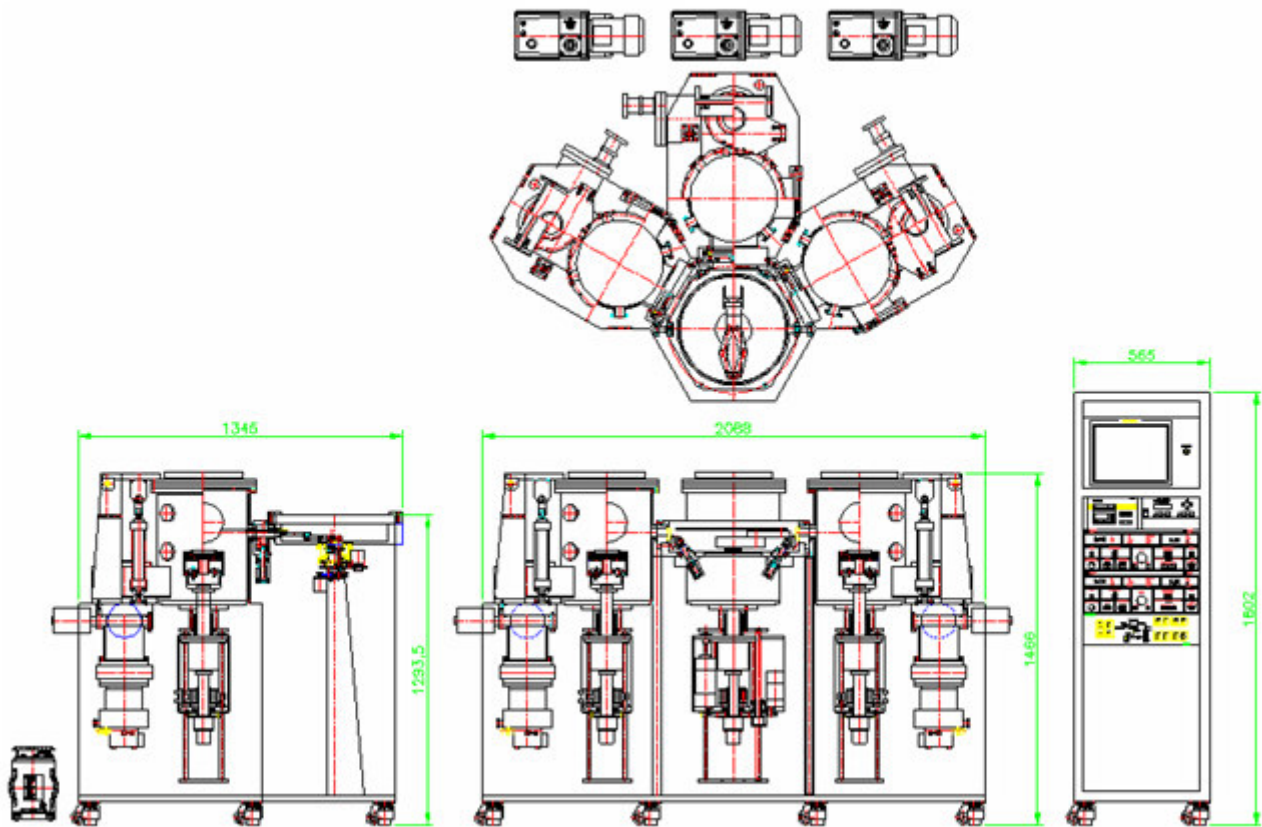
- n layer characteristics



Schematic diagram of dark conductivity analysis



◇ 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

Website: www.atechsystem.co.kr