

Qualified

Samsung semiconductor
Samsung Display
SK Hynix
Others ; Dongbu Hitek, ASMGK, SFA etc

Process

(PE)CVD, Metal, ALD, Etcher

Application

Leak Detection, Process Fault, Dry Cleaning Endpoint Detection

Features & Benefits

- CVD / PVD / Etch 공정의 PM과 TM에서 효율적이고 효과적인 실시간 Gas 분석
- Process Chamber 실시간 공정 이상 진단
- Cleaning 및 Seasoning 최적화
- 지속적인 Upgrade와 적용을 위한 빠른 Feedback
- 고객의 요구에 빠르게 Customizing이 가능하도록 H/W & S/W 자체 개발 기술 보유

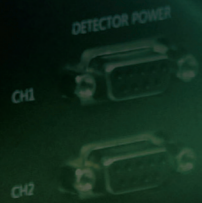


2014 Product Catalog VOL.1

Self-Plasma OES

SPOES

Model AEGIS Series



SPECIFICATION

CATEGORY	ITEM	DESCRIPTIONS
Pressure	Starting pressure of discharge	1mT ~ 5.0 Torr
Composition	Detectors / Controller	1 ~ Max. 4 (Available More Addition)
Optic	CCD sensor	2,048 pixels / 16 bits
	Spectral range	200 ~ 850nm
	Optical resolution	< ± 0.5nm
	Scan time	min. 50ms
	Optical window	Sapphire
Power	CCD Plasma Source Power	Max. 30W
	Power requirement	3.5A/12VDC
Operation	Operating system	Window 7
	Software	AOS (AEGIS Operating Software)
	Communication	Ethernet, RS232, Digital I/O
	Protocol	SECS, SECSII/GEM, TCP/IP, DeviceNet
Mechanic	Additional pumping	Not Need
	Vacuum interface	ISO NW25 (Reducer available)

공정별 특화 모델 적용!

Detector (AEGIS-7series)

- Standard Model : TM 일반

7N



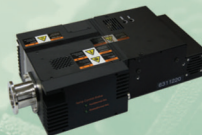
- Tungsten(W) 전용 Model

7W



- TSN(Ti/PM) 전용 Model

7NH



- Special Model : Hard 공정용

7Q

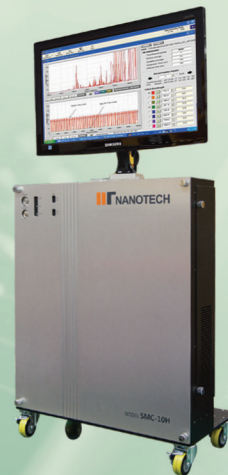


Controller (SMC-10series)

- **A type**



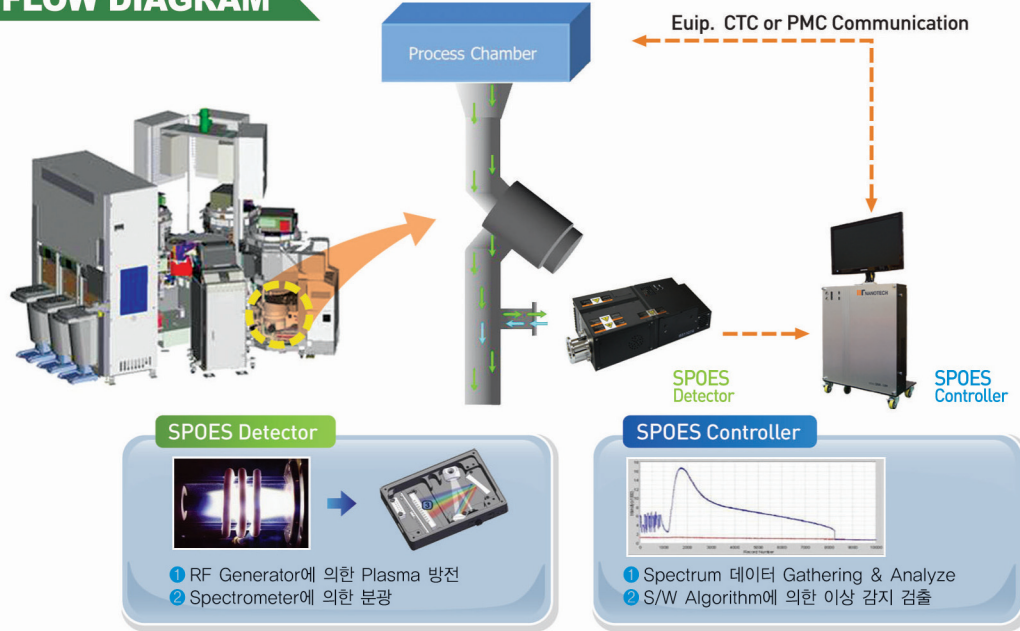
- **B type**



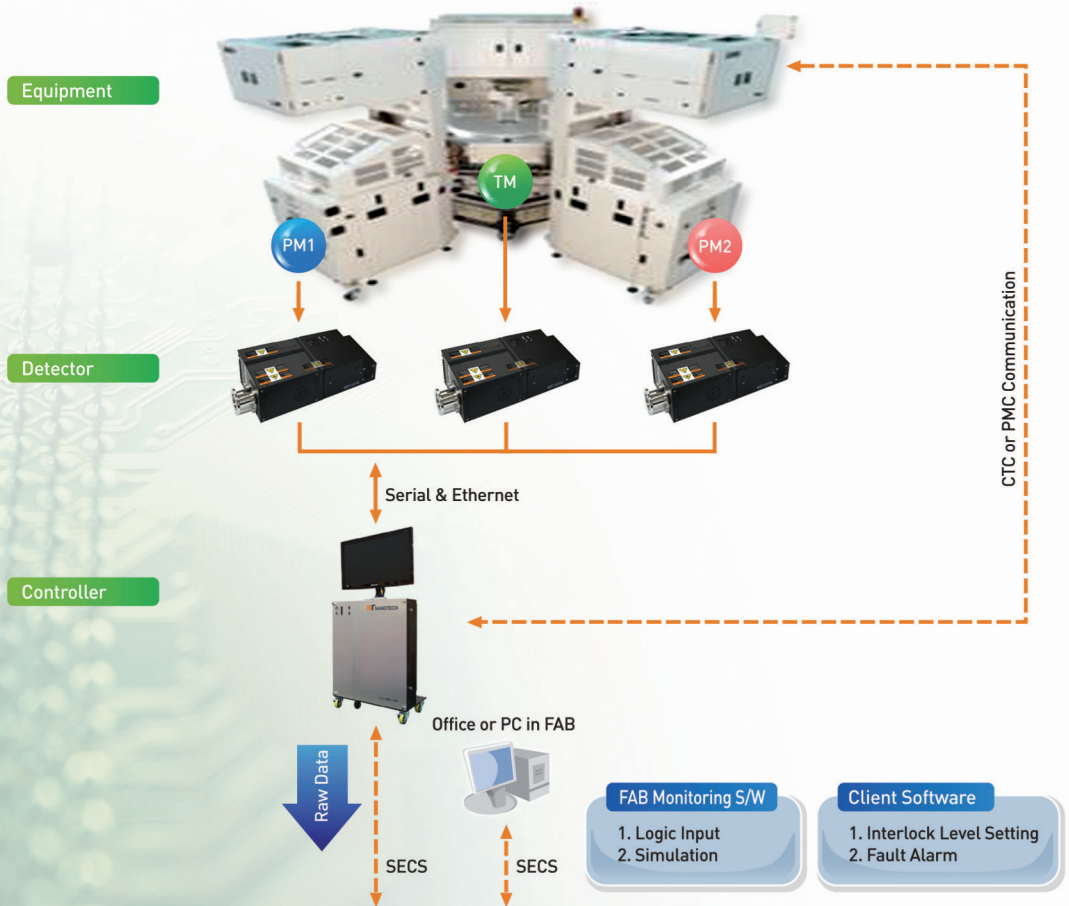
- **C type**



FLOW DIAGRAM



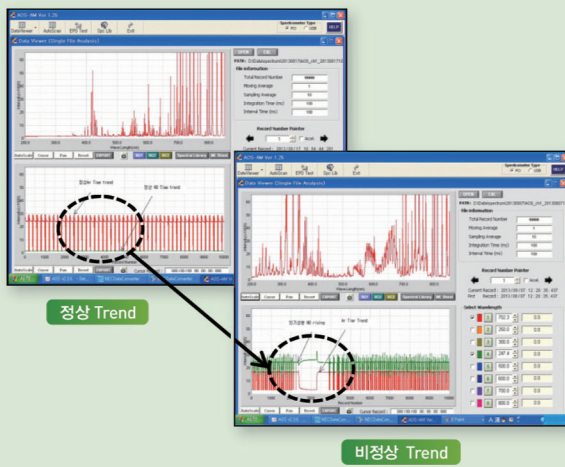
NETWORK CONFIGURATION



APPLICATION

In-situ Leak Detection

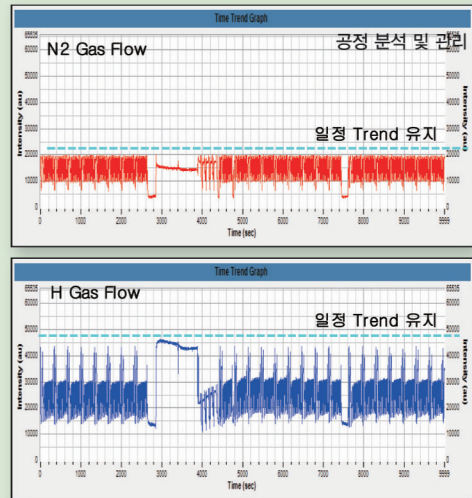
실시간 Leck 판단 및 관리



Ex) TM Leak Detection Trend

Process Analysis

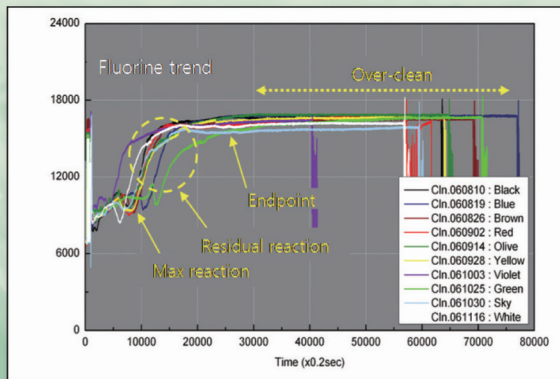
공정 분석 및 관리



Ex) Process진행시 각 Gas별 Time Trend

End Point Detection Optimization

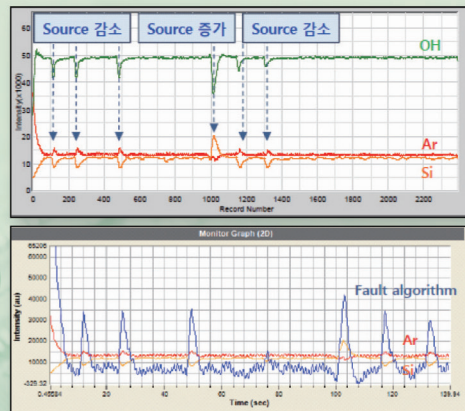
Etching or Cleaning EPD 최적화



Ex) Dry Clean Optimization
Overlay of 10 Clean Cycles : Synchronized Start

ALD Source Valve & MFC Fault Detection

이상 유무 분석 및 실시간 관리



Ex) ALD Source Verification