

Potentiostat + Galvanostat

WIZECM – 1200PREMIUM

신속한 A/S



편리한 조작으로 기초 실험부터 전문적인 실험까지 가능

Current Range : 2.0A~ 10nA

Compliance Voltage : ±15V

1 CHARACTERISTICS

주요특징	주요사양	기술&응용
<ul style="list-style-type: none">- 모델명 : WizECM – 1000 Premium- Potentiostat /Galvanostat- 국내 연구진이 개발한 국산제품- 사용이 편리한 소프트웨어- 합리적 가격을 갖춘 모델- 고객의 환경에 맞는 새로운 PotentioStat 시스템 개발 → 주문형 제작 가능	<ul style="list-style-type: none">- Control Voltage : $\pm 5V$- Compliance Voltage : $\pm 15V$- Current Range : 2.0A ~ 10nA- 16 bit ADC, DAC- 1024 Step Current Range- 정확도 : 16 bit < 0.01 % f.s	<ul style="list-style-type: none">- Technique<ul style="list-style-type: none">Cyclic Voltammetry(CV)Chrono Amperometry(CA)Static Chrono Potentiometry(CP)Potential Analysis(PA, OCV)Stripping voltammetry(SV)Linear Sweep Voltammetry(LSV)Battery TestSupercapacitorFuel CellCorrosion- Application<ul style="list-style-type: none">Thin Film, Corrosion, Biologic study,Battery, Fuel Cell, Solar Cell, etc

2 SPECIFICATION

MODEL	Current Range		
WizECM - 1200Premium	± 2.0A ~ ±10nA		
PotentioStat(ECM)			
Maximum Scan Rate	1000V/sec (1 kHz Sampling)		
Cell connection	2, 3 probe type, alligator clip cable		
LED	Run 1 ea / Connection 1 ea / Power 1 ea		
Input Impedance	$10^{12} \Omega$		
Bia current	< 5pA		
Scan rate Maximum	AC : 10V/s DC : 100 V/s		
acquisition time	50 μ s		
Current Measurement * 모델에 따른 변동사항 있음			
Range	±2.0A ~ ±10 nA [1000 ranges]		
Current Range Step	Auto 1024 Step Main Current Range Auto 13 Step in Low, High Current Range		
Resolution	16 bit		
Maximum resolution	1 pA ~ 1 nA		
Accuracy	16 bit < 0.01 % f.s		
Potential Measurement			
Range	± 5 V * Customer specified range		
Compliance Voltage	± 15 V		
Resolution	16 bit		
Accuracy	16 bit < 0.01 % f.s		
SYSTEM			
Dimension	Hight 9 cm	Width 35 cm	Depth 27 cm
weight	5 Kg		
Power	60 Hz, 220 V		
PC configuration	Windows 8/32/64 bit, xp, vist, Mac		
Interface	Ethernet(LAN)		
AD Converter	16 bit		
Electrode	Working Electrode, Counter Electrode, Reference Electrode		
Filter	Low Pass Filter (Software Filter : Cut Off Frequency Setting) (Hardware Filter : Auto Selecting)		
Faraday Cage	Option		
Temperature measurement	Option		

3 ANALYSIS-1

	TECHNIQUE	MODEL WizECM1200Premium
Voltage & Frequency	Current Range	2.0A ~ 10nA
	AC Scan Rate (V/sec)	100V/s
	DC Scan Rate (V/sec)	1000V/s
CV (PotentioStatic)	Linear Sweep Voltammetry (LSV)	
	Cyclic Voltammetry (CV)	
CP (GalvanoStatic)	Chronopotentiometry Static(Static)	
	Chronopotentiometry Pulse Dynamic(Dynamic Pulse)	
	Chronopotentiometry(Charge & Discharge)	
CA (PotentioStatic)	Chronoamperometry Static (Static)	
	Chronoamperometry Pulse Dynamic(Dynamic Pulse)	
PotentioStatic, Galvano Static	Programing Wave	

3 ANALYSIS-2

	TECHNIQUE	MODEL WizECM1200Premium
SV	Potentiostatic Stripping	
Corrosion	Cyclic Polarization Voltammetry (CPV)	
	Tafel Plot	
	Linear Polarization Voltammetry (LPV)	Option
Battery Test	Cyclic Voltammetry (CV)	
	Constant Current(CP Static)	
	Constant Voltage(CA Static)	
	Battery Charge and Discharge	
	Current Scan(LSV)	
Super Capacitor	Cyclic Voltammetry (CV)	
	Constant Current(CP Static)	
	Constant Voltage(CA Static)	
	Constant Current Charge and Discharge	
	Current Scan(LSV)	
Option	Network	
	Wireless Network	Option
	RDE Control	Option

4 SAMPLE DATA

Cyclic Voltammetric

Voltage range: - 0.3V ~ + 0.7V

Initial Potential : 0.2V

Scan rate : 50mV/s

Quiet Time : 3.0 sec

Scan number : 100

Current: 100 μ A

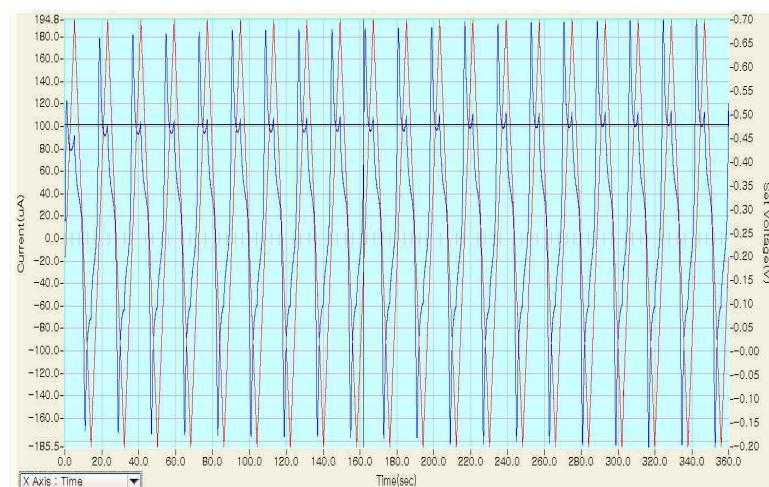
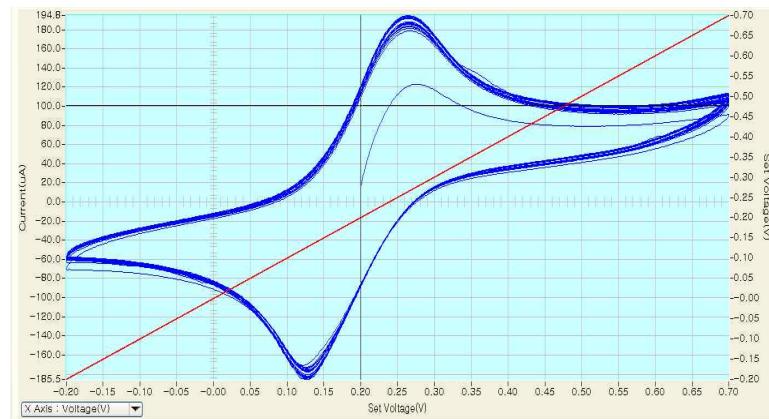
Reference Electrode : Ag/AgCl



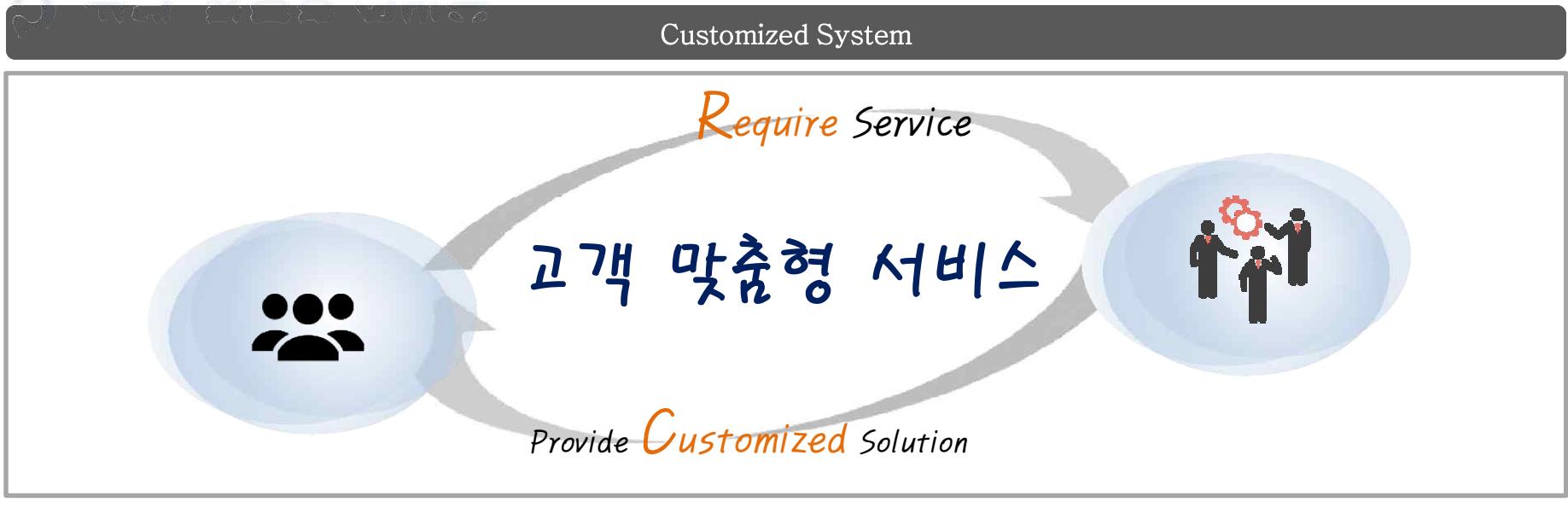
Current



voltage



5 고객 맞춤형 서비스



STEP1.



STEP2.



STEP3.



주문
형
제작

제품 주문 의뢰

- 연구분야에 맞는 제품 의뢰
- 실험 분야, 목적 등 종합 사양 검토

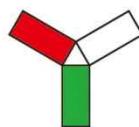
제품 제작

- 검토한 사항 분석
- 분석한 결과를 제품 제작 → 맞춤형 솔루션
- 현장 테스트 및 검증

제품 배송

- 제품 출고
- 방문 후, 설치 및 전문가 시범 운영

Contact
BITVALUE



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value creation

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