

(연구장비)규격서

품 명	영 문	Scanning Electrochemical Microscope	수 량	1	구분	국내물품 ()
	국 문	주사 전기화학 현미경				국외물품(0)
모델명	CH Instruments 920D SECM					
원산지	미국					
제조 회사	CH Instruments					
주요구성 부분 및 SPECIFICATION						
1. 용도						
1. This system can examine chemistry at high resolution near interface.						
2. General electrochemical techniques are available without any additional instrument attachment.						
3. The instrument provides many powerful functions, including straightforward file handing, extensive experimental control, flexible graphics, various data analysis, and efficient digital simulation.						
4. Operation & Control environment: Windows						
5. The instrument provides "real time absolute and relative distance display" and "real time probe and substrate current display"						
6. Major application using this instruments are electrode surface study, corrosion, Galvanic corrosion, biological samples, solid dissolution, Liquid/Liquid interfaces and membranes research.						
7. System includes a digital function generator, a bipotentiostat, high-resolution data acquisition circuitry, a three-dimensional nanopositioner, and sample/cell holder						
8. In addition to SECM imaging, three other modes of operation are provided for scanning probe applications: Surface Patterned Conditioning, Probe Scan Curve, and Probe Approach Curve, SISECM						
9. It automatically adjusts the step size to allow fast surface approach yet without the probe touching the surface						
2. 세부규격(성능 및 사양)						
Specification						
1. Bi-Potentiostat						
a. Output Compliance Voltage ; ±13V						
b. Probe Potential Range ; ±10V						
c. Substrate Potential ; ±10V						
d. Current sensitivity ; ±10pA to ±0.25A in 12ranges (0.0015% of range, minimum 0.3fA)						
e. Max Current ; ±250mA						
f. reference electrode input impedance ; 10^12 Ohm						
g. ADC resolution ; 20bit@1KHz, 24bit@10Hz						
h. Secondary ADC ; 1,000,000 sampling/sec @ 16bit						
I. CV,LSV scan rate: ; 0.000001 to 10,000V/sec						

j. CC,CA pulse width	; 1usec
k. DPV,NPV pulse width	; 0.001 to 10sec
l. SWV frequency	; 1 to 100kHz
m. Automatic potential and current zeroing	
n. Automatic and manual iR compensation	
o. Current low-pass filters, covering 8-decade frequency range, Automatic and manual setting	
p. RDE control output	: 0-10V (corresponding to 0-10000 rpm)
q. Flash memory for quick software update	
r. Serial port or USB port selectable for data communication	
2. Nanopositioner	
a. XYZ resolution	; 1.6nm
b. XYZ total distance	; 50mm
c. Stepper motor: 8nm with stepper motor positioner	
3. 표준 및 부속품(주요 자재 및 설비)	
System Configuration	
1. Bipotentiostat	1 set
2. three-dimensional nanopositioner	1 set
3. Cell/Sample holder	1 set
4. 선택부속 또는 추천부속품(주요 공사)	
5. A/S기간 등 기타사항	
Remark	
1. One year warranty service will be provide.	
2. The installation and operation & test-run should be carried out by the bidder at end-user's site.	

※ 작성 요령

본 규격서는 입찰공고에 게시되는 양식으로서 원하는 사양을 모두 빠짐없이 작성하여야 함.

① 품명 및 수량 : 구매 요청한 물품의 이름 등을 기재하되 하나의 시스템 안에 제작사나 제조업체가 다른 독립된 기능을 갖는 물품이 여러 개인 경우에는 각각의 품명을 구분하여 작성

※ 주장비(Main Part), 보조 장치(Accessory), 부대장비(Option 또는 Attachment) 등 따로 구분하여 작성

② 규격 : 규격은 되도록 상세하게 작성, 각 부속이 있다면 단위(개,대)까지 작성(되도록 국문으로 작성)