



### SMU Module Specifications

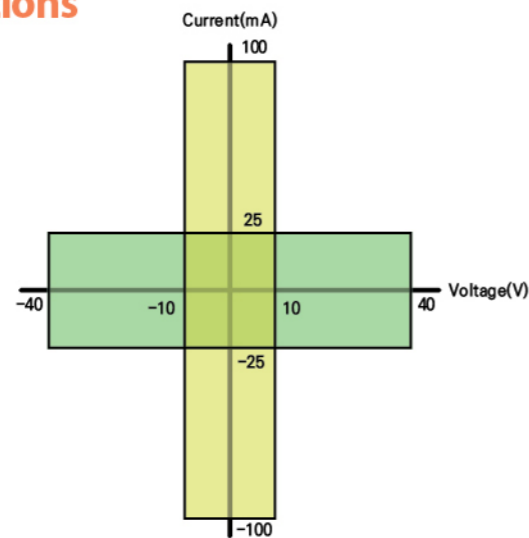
Voltage range, resolution, and accuracy <sup>1</sup> (each ch)				
Voltage range	Force resolution <sup>2</sup>	Measure resolution <sup>2</sup>	Measure accuracy	Maximum current
±0.5 V	5 μV	0.5 μV	±(0.02%+150 μV)	100 mA
±2 V	10 μV	2 μV	±(0.02%+200 μV)	100 mA
±10 V	50 μV	10 μV	±(0.02%+1mV)	100 mA
±40 V	500 μV	40 μV	±(0.02%+2mV)	25 mA

Current range, resolution, and accuracy <sup>1</sup>				
current range	Force resolution <sup>2</sup>	Measure resolution <sup>2</sup>	Measure accuracy	Maximum voltage
±1nA	10 fA	1 fA	±(0.1%+400 fA)	40V
±10nA	50 fA	5 fA	±(0.1%+2 pA)	40V
±100 nA	500 fA	20 fA	±(0.1%+20 pA)	40V
±1μA	5 pA	200 fA	±(0.1%+200 pA)	40V
±10μA	50 pA	2 pA	±(0.1%+2 nA)	40V
±100 μA	500 pA	20 pA	±(0.05%+20 nA)	40V
±1mA	5 nA	200 pA	±(0.05%+200 nA)	40V
±10 mA	50 nA	2 nA	±(0.05%+2 μA)	40V
±100 mA	500 uA	20 nA	±(0.05%+20 μA)	40 V (10 V) <sup>3</sup>

- Notes
1. Resolution and accuracy is valid under specific environmental conditions.
  2. Specified resolution is limited by fundamental noise limits.
  3. 40V(10mA<I<sub>o</sub>≤25mA), 10V(25mA<I<sub>o</sub>≤100mA)

### SMU Module Specifications

Measurement and output range  
(rated power : 1W)



### Components



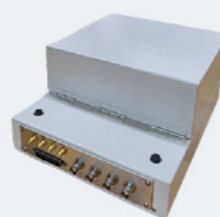
S2000A



Triaxial cable (SMU)



LAN Cable



DUT box & Grabber



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# S2000A

## Electrical Parameter Analyzer



본 카탈로그의 제품사양 및 외형은 품질개선을 위해 예고 없이 변경될 수 있습니다.

# S2000A



## Features

- Accelerates R&D for semiconductor and electrical materials, enabling the evaluation of electrical parameters across diverse fields, including semiconductors, advanced materials, and electrochemistry.
- Provides precise measurements, including current-voltage (I-V) characteristics.
- Supports both manual and fully automated measurements for R&D applications.
- Features up to 3 slots for various instrument modules to suit customer requirements.

## General Information

- **Operating Condition**  
Temperature: 10~40 degree C  
Humidity: 10~75% RH  
Pressure: 800~2060 hpa
- **Power requirement**  
Rated Voltage : Main 100~240 Vac  
Rated Frequency : 50/60 Hz, 1 Phase, 2Wires + PE  
Rated Current : 10 A
- **Size and Mass**  
Mainframe size (W x H x D) : 415 mm x 125 mm x 420 mm  
Mass of equipment(kg) : 9.5kg (LV-SMU 4ch)
- **Calibration period: 1year**
- **Warm up time: 30 min (at least)**

## Key Specifications / Functions

Measurement Capabilities	Features
Current/Voltage(IV) (S2020)	<ul style="list-style-type: none"> <li>• Voltage and Current Range : 40V / 100mA</li> <li>• Current and Voltage Resolution: 1fA / 0.1μV</li> <li>• Spot, Sweep and other function for basic and advance IV measurement</li> </ul>

## Instrument Modules

Code	Name	Description	Qty	Total channel
S2020	LVSMU	Low Voltage SMU (2ch) : 1W, 40V / 100mA (each ch)	2ea	4ch

## Software

T-Space (Test Management Studio)	T-REX
<p>Basic Test System S/W                      - Sets each device and item                      - Displays the Graph and Data of test device</p>	<p>Automation Test System S/W                      - Manages Control of Probe Station                      - Programs recipe</p>

## Measurement Example

