



**NEW**

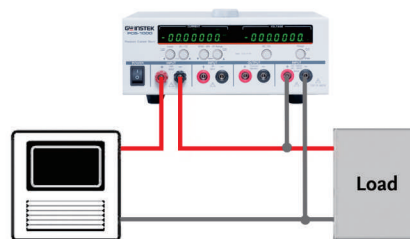


PCS-1000 is a High-Precision D.C. and A.C. Current Shunt Meter which carries built-in current shunts and high-accuracy current measurement circuits. PCS-1000 not only measures current in five current levels — 300A, 30A, 3A, 300mA and 30mA, but also measures voltage at 6 ½ digit resolution simultaneously. This unique feature puts PCS-1000 in an unprecedented position among all the shunt meters available in the market today. After a long time operation, PCS-1000 is able to maintain high measurement accuracy in spite of the temperature variation. This is due to its core design based on the high stability and low temperature coefficient shunts. PCS-1000, a verification-lab level current and voltage measurement equipment, is suitable for the R&D, quality verification and testing jobs of all power products such as power supply, communications system power, server power and electronic load. The maximum voltage/current measurement ranges of PCS-1000, including DC 1000V/AC 600V/AC 300A/DC 300A, meet all current and voltage measurement challenges of every power industry. \*

\* PCS-1000 can measure A.C. voltage and current simultaneously but it can't measure phase. Therefore, it does not provide power measurement function.

### Simultaneously Conduct Precision And Stable Current And Voltage Measurement

PCS-1000 High-Precision Current Shunt Meter can simultaneously measure current and voltage. Compared with the test of traditional models or meters in other brands, PCS-1000 is easy-to-use in connection and there is no requirement of any additional instrument. The following diagram shows the connection method of measuring voltage on the load and measuring current simultaneously.



**PCS-1000 Current Shunt Meter Simultaneously Measures Current and Voltage**

### A.C./D.C. Voltage and Current Level Selection

PCS-1000 has five selectable voltage and current measurement levels to meet users' terminal measurement requirements by manual or automatic selection. In selecting current levels, users must, at the same time, select corresponding current input terminal. Please refer to respective current input terminals :

(A) 30A Max (B) 3A Max (C) 300A Max



## PCS-1000

### FEATURES

- 6 1/2 Digit Measurement Resolution
- Dual Measurement for Voltage and Current
- AC & DC Current Measurement Range : 30mA/300mA/3A/30A/300A (Maximum)
- AC Voltage Measurement Range : 200mV/2V/20V/200V/600V (Maximum)
- DC Voltage Measurement Range : 200mV/2V/20V/200V/1000V (Maximum)
- Auto Zero Circuit
- Standard Interfaces: USB, GPIB



Front



Rear Panel

### APPLICATIONS

- Switching D.C. Server Power Supply Dedicated for the Cloud System
- Switching D.C. Power Supply For Communications Equipments
- A.C. Power Supply
- D.C. Electronic Load
- Others Power Supply
- Calibration Lab

## SPECIFICATIONS

### DC VOLTAGE CHARACTERISTICS

	Range	23°C±5°C (1 Year)	Temperature Coefficient / °C
<b>Accuracy</b>	200.0000mV	0.0050+0.0035	0.0005+0.0005
	2.000000V	0.0050+0.0010	0.0005+0.0001
	20.00000V	0.0050+0.0010	0.0005+0.0001
	200.0000V	0.0050+0.0010	0.0005+0.0001
	1000.000V	0.0050+0.0020	0.0005+0.0001
<b>Accuracy</b> ±(% of reading +% of Range); Voltage input Resistance:10MΩ for all DC Voltage ranges			

### DC CURRENT CHARACTERISTICS

	Range	Burden Voltage	23°C±5°C (1 Year)	Temperature Coefficient / °C
<b>Accuracy</b>	30.00000mA	<0.4V	0.01+0.005	0.001+0.002
	300.0000mA	<0.5V	0.01+0.005	0.001+0.002
	3.000000A	<0.8V	0.01+0.005	0.001+0.002
	30.00000A	<0.8V	0.01+0.005	0.001+0.002
	300.0000A	<0.8V	0.02+0.005	0.001+0.002
<b>Accuracy</b> ±(% of reading +% of Range)				

### TRUE RMS AC VOLTAGE CHARACTERISTICS

	Range	Frequency	23°C±5°C (1 Year)	Temperature Coefficient / °C
<b>Accuracy</b>	200.0000mV			0.005+0.005
	2.000000V	45Hz-2KHz	0.5+0.05	0.005+0.005
	20.00000V	2KHz-10kHz	1.0+0.05	0.005+0.005
	200.0000V	10kHz-20kHz	2.0+0.10	0.005+0.005
	600.000V			0.005+0.005
<b>Accuracy</b> ±(% of reading +% of Range)				

### TRUE RMS AC CURRENT (AC+DC) CHARACTERISTICS

	Range	Frequency	23°C±5°C (1 Year)	Temperature Coefficient / °C
<b>Accuracy</b>	30.00000mA	45Hz-2KHz	0.5+0.05	0.03+0.006
	300.0000mA	2KHz-10kHz	1.0+0.05	0.03+0.006
	3.000000A			0.03+0.006
	30.00000A	45Hz-400Hz	0.5+0.05	0.03+0.006
	300.0000A			0.03+0.006
<b>Accuracy</b> ±(% of reading +% of Range)				

### CURRENT MONITOR ACCURACY

Range	Shunt Value	DC Accuracy	AC Accuracy ≤ 400Hz	Max Input DC/AC RMS
	10Ω	0.01%	0.1%	30mA
	1Ω	0.01%	0.1%	300mA
	0.1Ω	0.01%	0.1%	3A
	0.01Ω	0.01%	0.1%	30A
	0.001Ω	0.02%	0.1%	300A

### POWER SOURCE

100V/120V/220V/240V±10%

### POWER LINE FREQUENCY

50/60Hz

### OPERATING ENVIRONMENT

Full Accuracy for 0°C ~ 50°C, Full accuracy to 80% R.H. at 40°C

### STORAGE ENVIRONMENT

-40°C ~ 70°C

### POWER CONSUMPTION

Max 35VA

### DIMENSIONS & WEIGHT

210(W) x 80(H) x 390(D)mm ; Approx. 6kg

Specifications subject to change without notice. SB0102GD1DH

### ORDERING INFORMATION

**PCS-1000** Precision Current Shunt Meter

### ACCESSORIES

User Manual x 1, AC Power Cord x 1  
**GTL-105A** Alligator Clip Test Lead (3A Max)  
**GTL-207** Banana Plug Test Lead  
**GTL-240** USB Cable  
**PCS-001** Basic Accessory Kit

### OPTIONAL ASSESSORIES

**GRA-419-J** Rack Mount Adapter (JIS)  
**GRA-419-E** Rack Mount Adapter (EIA)

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