

# Maximum Operating Voltage 800V

Ideal for high capacity power supply and rechargeable battery evaluation!



## Testing with hyper-realistic load simulation made possible!

The PLZ-5WH high power DC electronic load series is where durable, reliable ingenuity meets multifunctional and high power design. Up to 20kW can be achieved with a single unit. Thanks to the highly power dense design of the PLZ-5WH, this series can sink up to 20kW of power in a single unit. Load simulation can be achieved faster than ever before thanks to the reliable, high speed design of the PLZ-5WH current control circuits. Accurate current measures can be made with extremely high setting resolution. A color LCD display allows for highly visible, user-friendly front panel operation. RS232C, USB, and LAN digital interfaces are included as standard for simple integration into any system.

PLZ20005WH

**20kW** 

PLZ12005WH

12kW

## High Voltage High Capacity DC Electronic Load

## **PLZ-5WH Series**

NEW

- Operating voltage: 10V 800V (Min. 1.5V)
- 20kW in a single unit (PLZ20005WH)
- 100kW/2000A with parallel operation (Max. 5 units)
- Synchronization: Load ON/OFF control and sequences can be synchronized among multiple units
- Arbitrary IV characteristic (ARB) mode
- User-friendly color LCD display
- Data-logging: voltage/current/power measurements (Measurement display, programmable internal memory)
- ■LAN (LXI)/USB/RS232C standard digital interface \*GPIB optional

## Lineup

Model	Max Current	Max Voltage	Power
PLZ12005WH	240A	10V to 800V	12kW
PLZ20005WH	400A	100 to 8000	20kW

## ■ Specification

#### Rating

Item		PLZ12005WH	PLZ20005WH
Operating voltage (DC)		10 V ~ 800 V	
Current		240 A	400 A
Power		12000 W	20000 W
Input Resistance with load OFF		± 800 V	
Min. Operating Voltage	At Rated Current	10 V	
	Current output	under1.5 V	

<sup>\*1.</sup> In the case of parallel operation, about 3.4 M  $\Omega$  / unit

#### ■ Constant Current (CC) Mode

Item		PLZ12005WH	PLZ20005WH
Operating Range		0 A ~ 240 A	0 A ~ 400 A
Setting Range		0 A ~ 242.400 A	0 A ~ 404.00 A
Resolution		5 mA	10 mA
Setting Accuracy		± (0.2 % of set + 0.1 % of rating)	
	Parallel Operation	on ± (0.4 % of set + 0.2 % of rating)	

#### ■ Constant resistance (CR) Mode

- Constant resistance (Cr.) mede				
Item		PLZ12005WH	PLZ20005WH	
Operating Range*	H range	$6000~\text{mS} \sim 0~\text{S} \\ (0.167~\Omega \sim \text{Open})$	$10~\mathrm{S}\sim0~\mathrm{S}$ $(0.1~\Omega\sim\mathrm{Open})$	
Operating hange	L range	$60~\text{mS} \sim 0~\text{S} \\ (16.7~\Omega \sim \text{Open})$	$100~\text{mS} \sim 0~\text{S} \\ (10~\Omega \sim \text{Open})$	
Satting Banga	H range	$\begin{array}{c} \text{6060.0 mS} \sim \text{0 S} \\ \text{(0.165 } \Omega \sim \text{Open)} \end{array}$	10.1000 S $\sim$ 0 S (0.099 Ω $\sim$ Open)	
Setting Range	L range	60.600 mS $\sim$ 0 S (16.5 $\Omega$ $\sim$ Open)	$101.000 \text{ mS} \sim 0 \text{ S} \ (9.9 \ \Omega \sim \text{Open})$	
Resolution	H range	0.2 mS		
Resolution	L range	0.002 mS		
Setting Accuracy*	2 H ran	H range ± (0.5 % of set + 0.5 % of rating)		
	L ran	L range ± (0.5 % of set + 0.2 % of rating)		
Parallel	H ran	H range $\pm$ (1.0 % of set + 1.0 % of range)		
Operation	L ran	L range ± (1.0 % of set + 0.4 % of range)		
Response Speed		NORM / FAST		

#### ■ Constant voltage (CV) Mode

Item	PLZ12005WH	PLZ20005WH	
Operating Range	10 V ~ 800 V		
Setting Range	0 V ~ 808.00 V		
Resolution	20 mV		
Setting Accuracy*1	± (0.05 % of set + 0.05 % of rating)		
Parallel Operation	± (0.1 % of set -	+ 0.1 % of rating)	
Response Speed	NORM / FAST		

<sup>\*1.</sup>Input Voltage in the operating range, at the remote sensing terminals

#### ■ Constant Power (CP) Mode

Item	PLZ12005WH	PLZ20005WH	
Operating range	0 W ~ 12000 W	0 W ~ 20000 W	
Setting range	0 W ~ 12120 W	0 W ~ 20200 W	
resolution	0.5 W	0.5 W	
Setting Accuracy * 1	uracy *1 $\pm$ (0.5 % of range + 0.2 A $\times$ Vin) $\pm$ (0.5 % of range + 0.4 A $\times$		
Parallel operation	$\pm$ (1 % of range + 0.1 % current rating $\times$ Vin)		

<sup>\*1.</sup> Vin : Load Terminal Voltage or SENSING Terminal Voltage

#### ■ Arbitrary IV Characteristics (ARB) Mode

Item	PLZ12005WH	PLZ20005WH	
Operating range	3-100points of current within the voltage range (Space between points are automatically linearly interpolated)		
Response speed	500 us, 1 ms, 2 ms, 5 ms, 10 ms, 20 ms, 50 ms, 100 ms, or OFF		

#### ■ General Specifications

Item		PLZ12005WH	PLZ20005WH	
Input Voltage Range		100 Vac ~ 240 Vac (90 Vac ~ 250 Vac) Single Phase		
Input Frequ	ency Range	47 Hz ~ 6	3 Hz	
Power Cons	sumption	740 VAmax		
Inrush Current (Peak value)		100 A or less (Cold Start)		
	Operating Temp. Range	0 °C ~ 40 °C		
	Operating Humidity Range	20 %rh $\sim$ 85 %rh (No condensation)		
Test Condition	Storage Temp. Range	-20 ℃ ~	70 ℃	
	Storage Humidity Range	90 %rh or less (No condensation)		
	Storage Location	Indoors、2000 m 、CAT II		
la a datia a	Primary - Input Terminal	1000 Vdc、Over 30 MΩ (70 %rh or less)		
Insulation resistance	Primary - Chassis			
resistance	Input Terminal - Chassis	1000 Vdc、Over 3 MΩ (70 %rh or less)		
	Primary - Chassis	1500 Vac. No changes in 5s		
Withstand voltage	Primary - Input Terminals			
	Input Terminal - Chassis	1200 Vac. No changes in 5s		
Dimensions (Max)		429.8(545)W ×	429.8(545)W	
		396.2(495)H	573.5(670)H	
		550(625)Dmm	550(625)Dmm	
Weight		Approx. 64 kg	Approx. 93 kg	

<sup>\*2.</sup> At the load input terminal

<sup>\*1.</sup>Conductance[S]=Input current[A]/ Input voltage[V] = 1/ Resistance value[ $\Omega$ ] \*2.Converted value with input current. At the sensing end during remote sensing