Specification Table

Specification		1CH Model		2CH Model	3CH model		CH3	CH1/CH2	CH3	CH4
Model name		PDW32-6SG PDW36-10SG/PDW72-5SG		PDW32-3DG	PDW32-3TG/PDW30-6TG PDW60-3TG/PDW36-5TG			PDW32-3QG		
Power function	CH	CH1		CH1/CH2	CH1/CH2		CH3	CH1/CH2	CH3	CH4
Output range	Voltage / Current	PDW32-6SG 0~32V/0~6A / PDW36-10SG 0~36V/0~10A / PDW72-5SG 0~72V/0~5A		0~32V/0~3A	PDW32-3TG 0~32V/0~3A / PDW30-6TG 0~30V/0~6A / PDW60-3TG 0~60V/0~3A / PDW36-5TG 0~36V/0~5A		1.8, 2.5, 3.3, 5.0 V/5A USB port: 3A	0~32V/0~3A	0~5V / 0~1A	0~15V
	Tracking Mode Series voltage /Parallel current	—		0~64V/0~6A	PDW32-3TG 0~64V/0~6A / PDW30-6TG 0~60V/0~12A / PDW60-3TG 0~120V/0~6A / PDW36-5TG 0~72V/0~10A		—	0~64V/0~6A	—	
CV characteristics	Input variation	≦ 0.01%+3mV		≦ 0.01%+3mV	≦ 0.01%+3mV		≦ 3mV	≦ 0.01%+3mV		
	Load variation	≦ 0.01%+5mV		≦ 0.01%+3mV	≦ 0.01%+3mV		≦ 5mV	≦ 0.01%+3mV		
	Ripple noise (5~1MHz)	PDW32-6SG ≦ 0.5mVrms / Other Model ≦ 2mVrms		≦ 0.35mVrms	≦ 0.35mVrms		≦ 2mVrms	≦ 0.35mVrms	≦ 1mVrms	
	Transient response time	≦ 100μs		≦ 50μs			≦ 100μs	≦ 50μs		
CC characteristics	Input variation	PDW32-6SG ≦ 0.2%+3mA / Other Model ≦ 0.01%+3mV		≦ 0.2%+3mA	PDW32-3TG ≦ 0.2%+3mA / Other Model ≦ 0.01%+3mV		—	≦ 0.2%+3mA		
	Load variation	PDW32-6SG ≦ 0.2%+3mA / Other Model ≦ 0.01%+3mV		≦ 0.2%+3mA	PDW32-3TG ≦ 0.2%+3mA / Other Model ≦ 0.01%+3mV			≦ 0.2%+3mA		
	Ripple noise	≦ 2mArms		≦ 2mArms	≦ 2mArms			≦ 2mArms		
Resolution	Setting voltage/current	PDW72-5SG 2mV/0.1mA / Other Model 1mV/0.2mA		1mV/0.1mA	PDW32-3TG 1mV/0.1mA / PDW30-6TG 1mV/0.2mA / PDW60-3TG 2mV/0.1mA / PDW36-5TG 1mV/0.2mA			1mV/0.1 m A		
	Display voltage/current	PDW32-6SG, PDW36-10SG: 0.1mV/0.2mA, Other Model: 0.1mV/0.1mA						0.1mV/0.1mA		
Tracking Mode	Tracking errors — No load	—		≦ 0.1% +10mV	PDW60-3TG ≦ 0.2% +20mV / Other Model ≦ 0.1% +10mV		—	≦ 0.1% +10mV	—	
	Tracking errors — With load			Above value+100mV	PDW32-3TG Above value+100mV / Other Model Above value+200mV			Above value+100mV		
	Parallel: CV load variation			≦ 0.01%+3mV				≦ 0.01%+3mV		
	Parallel:CC input variation			≦ 0.02%+5mV	PDW32-3TG ≦ 0.02%+5mV / PDW30-6TG ≦ 0.02%+5mV / PDW60-3TG ≦ 0.01%+5mV / PDW36-5TG ≦ 0.01%+5mV			≦ 0.02%+5mV		
	Series: CV load variation			≦ 0.01%+5mV				≦ 0.01%+5mV		
	Series: CV input variation			≦ 100mV	PDW32-3TG ≦ 100mV / Other Model ≦ 200mV			≦ 100mV		
	CV ripple noise (5~1MHz)			≦ 1mVrms	PDW32-3TG ≦ 1mVrms / Other Model ≦ 2mVrms			≦ 1mVrms		
Accuracy	Voltage setting — Terminal	± (0.03%rdg+10mV)					± 5%	± (0.03%rdg+10mV)	—	
	Voltage setting — USB port	—					± 0.35V	—		
	Current setting	± (0.3%rdg+10mA)						± (0.3%rdg+10mA)		
	Voltage display	± (0.03%rdg+10mV)					—	± (0.03%rdg+10mV)		
	Current display	± (0.3%rdg+10mA)						± (0.3%rdg+10mA)		
Load functions	CH	CH1		CH1/CH2	CH1/CH2			CH1/CH2		
	Power	0~100.00W		0~50.00W	0~50.00W			0~50.00W		
Input range	Voltage / Current	PDW32-6SG 1~33V/0~6.2A / PDW36-10SG 1~36.5V/0~10.2A / PDW72-5SG 1~72.5V/0~5.2A		1~33V/0~3.2A	PDW32-3TG 1~33V/0~3.2A / PDW30-6TG 1~32V/0~6.2A / PDW60-3TG 1~62V/0~3.2A / PDW36-5TG 1~36.5V/0~5.2A			1~33V/0~3.2A		
Characteristics	CV mode	Setting range: 1.500V~voltage input range, Resolution: 10mV, Accuracy/Display accuracy: ± (0.1%+30mV)								
	CC mode	Setting range: Same as current input range, Resolution: 1mA, Accuracy/Display accuracy: ± (0.3%+10mA)								
	CR mode	Setting range: 1 Ω ~1k Ω , Resolution: 1 Ω , Accuracy/Display accuracy: ± (3%+1 Ω), (≧ 0.1V and ≧ 0.1A)								

General
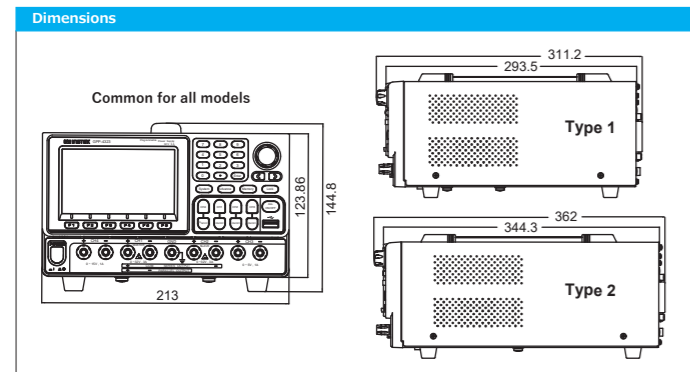
Dimension W x H x D	Type 1	213 x 145 x 311.2 mm: approx.7.5kg — PDW32-6SG, PDW32-3DG, PDW32-3TG, PDW32-3QG
Weight	Type 2	213 x 145 x 362 mm: approx.10kg — PDW36-10SG, PDW72-5SG, PDW30-6TG, PDW36-5TG, PDW60-3TG
Input voltage		AC100V/120V/220V/230V ± 10%, 50Hz/60Hz, Switchable
Power consumption		PDW32-6SG, PDW32-3DG: 360W / PDW32-3TG, PDW32-3QG: 420W / PDW36-10SG, PDW72-5SG, PDW30-6TG, PDW36-5TG, PDW60-3TG: 680W
Insulating resistance		Between chassis and output terminal: 20M Ω or more (DC 500V), Between chassis and AC input terminal: 30M Ω or more (DC 500V)
Use environment/storage environment		Temperature: 0 ～ 40℃ , Relative humidity: 80% or less/ Temperature：-10℃～ 70℃ , Humidity: 70% or less

Dimensions

Common for all models

Type 1 — 293.5 / 311.2 / 123.86 / 144.8 / 213

Type 2 — 344.3 / 362

Accessory

Power Cable, Using the product safely		1 piece each for all models
Test lead	GTL-104A x 1, GTL-105A x 1	PDW32-6SG, PDW36-10SG, PDW72-5SG
	GTL-104A x 2	PDW32-3D
	GTL-104A x 3	PDW30-6TG, PDW32-3TG, PDW36-5TG, PDW60-3TG
	GTL-104A x 2, GTL-105A x 2	PDW32-3QG
Rear output terminal connector x 1 Short bar x 1		PDW36-10SG, PDW72-5SG, PDW30-6TG, PDW36-5TG, PDW60-3TG
The instruction manual can be downloaded from our website.		

Accessories・Options

USB cable (USB2.0, Type A-B, approx. 1.2m)	GTL-246
Rack mount adapter for TYPE1	EIA: GRA-437-E, JIS: GRA-437-J
Rack mount adapter for TYPE1 and TYPE2	EIA: GRA-449-E, JIS: GRA-449-J

GRA-437 / 449J   GRA-437 / 449E

TEXIO
Test and Measurement Solutions

PDW series catalog

Multifunctional DC regulated power supply with electronic load function

Multifunctional DC regulated power supply with electronic load function

PDW Series

1ch PDW32-6GS	2ch PDW32-3DG	3ch PDW36-5TG
1ch PDW36-10SG	3ch PDW30-6TG	3ch PDW60-3TG
1ch PDW72-5SG	3ch PDW32-3TG	4ch PDW32-3QG

- High resolution: Setting 1mV/0.1mA, Reading 0.1mV/0.1mA
- Equipped with electronic load function（CH1, CH2 / CC, CV, CR mode）
- Low noise and low ripple : ≦350μVrms/≦2mArms (In the case of PDW32-3DG)
- Series/parallel tracking function（CH1-CH2）
- Delay/Monitor/Recorder function
- Protection function : OVP/OCP/OTP/OPP (OPP: In electronic load operation)
- Sequence function（CH1・CH2）
- Internal memory（Panel setting/Sequence/Delay/Recorder）
- Output power from the USB power supply port（3CH Model）
- Voltage remote sense function
   (1CH Model, 3CH Model except PDW32-3TG and PDW32-3QG)
- 4.3 inch color TFT LCD
- Standard Interface : USB, RS-232C, GP-IB, LAN, External I/O

Panel description

※The image is PDW32-3QG.

※The image is of housing size Type 2.

1. 4.3 inch color LCD
2. 10 key
3. Function key
4. Output ON/OFF key
5. USB host port
6. Front output
7. Power switch
8. Power supply port (3CH Model only)
9. Input voltage switch
10. AC input terminal & FUSE
11. RS-232C port
12. USB device port
13. External I/O port
14. GP-IB port
15. LAN port
16. Rear output (Housing size Type 2 only)

Overview

RS-232C STNDARD **USB** STNDARD **LAN** STNDARD **GP-IB** STNDARD **Programmable I/O** CE

The PDW series is a low-noise, low-ripple, multi-output, high-resolution DC stabilized power supply that uses a dropper method. All models are equipped with an electronic load function (CH1 and CH2, CH1 model only CH1), allowing power supply and discharge operations with one unit.
It is designed to support a variety of tests with its rich functionality, including battery charge/discharge tests and various standard communication interfaces and sequences.

Model name	Output	CH1	CH2	CH3	CH4	Housing size	Note	Front output terminal shape
PDW32-6SG	1	0-32V 0-6A	—	—	—	Type 1	With sensing function	
PDW36-10SG	1	0-36V 0-10A	—	—	—	Type 2	With sensing function	
PDW72-5SG	1	0-72V 0-5A	—	—	—	Type 2	With sensing function	
PDW32-3DG	2	0-32V 0-3A	0-32V 0-3A	—	—	Type 1	—	
PDW30-6TG	3	0-30V 0-6A	0-30V 0-6A	1.8/2.5/3.3/5V 5A	—	Type 2	CH3 is set value fixed With sensing function	
PDW32-3TG	3	0-32V 0-3A	0-32V 0-3A	1.8/2.5/3.3/5V 5A	—	Type 1	CH3 is set value fixed	
PDW36-5TG	3	0-36V 0-5A	0-36V 0-5A	1.8/2.5/3.3/5V 5A	—	Type 2	CH3 is set value fixed With sensing function	
PDW60-3TG	3	0-60V 0-3A	0-60V 0-3A	1.8/2.5/3.3/5V 5A	—	Type 2	CH3 is set value fixed With sensing function	
PDW32-3QG	4	0-32V 0-3A	0-32V 0-3A	0-5V 0-1A	0-15V 0-1A	Type 1	—	

## Multi-channel & high-resolution settings and measurements

· **Reading resolution**
Voltage : 0.1mV
Current : 0.1mA or 0.2mA

· **Setting resolution**
Voltage : 1mV or 2mV
Current : 0.1mA or 0.2mA

· **Reading accuracy**
Voltage : ±(0.03% reading + 10mV)
Current : ±(0.3% reading + 10mA)

Reading and setting resolution varies by model. For details, please refer to the resolution in the rating column.

Each output of the PDW series has high resolution for setting/reading (monitor display) and allows detailed control, which can be easily performed using 10 keys. Each channel is isolated and can be operated independently, and output ON/OFF can be controlled individually or collectively.
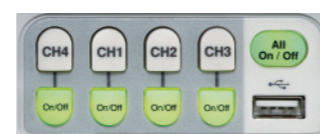
## Series and parallel tracking operation

The PDW series is equipped with serial/parallel connections for internal connections. Normal series/parallel connection of two power supplies requires a separate interconnection between the two units, but by providing an internal connection switching function, external connections between each other are no longer required, making it easier. It has become. (Excluding 1CH model)

Series/parallel setting is easy with keys

Series | Parallel
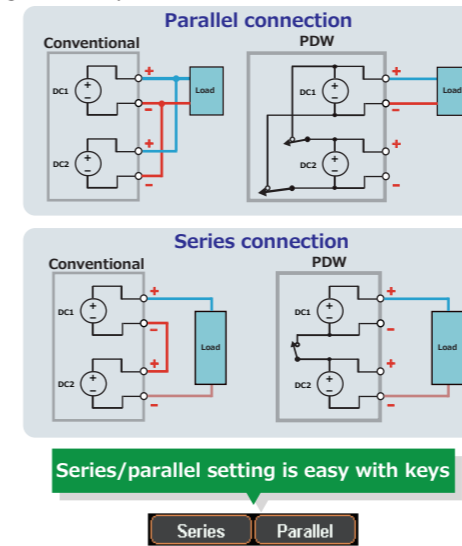
Electronic load function

CH1 and CH2 can be switched to electronic load mode. The electronic load function has a maximum of 50W (1CH model is 100W) and supports three modes: CV/CC/CR.
Also, mixed operation is possible, such as outputting CH1 as a DC stabilized power supply while operating CH2 as an electronic load.

Charge
Discharge
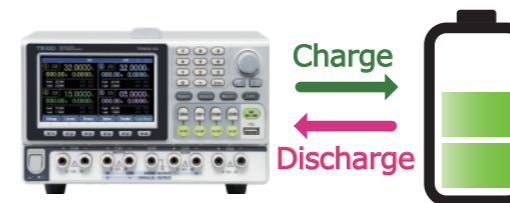
Sequence

CH1 and CH2 are equipped with a sequence output function. The sequence function is a function that sets the power supply output voltage and current for each step and executes them in order, and electronic load functions (CV/CC) can also be operated. The step time width can be set between 1 and 300 seconds, and the maximum number of steps is 2048. Eight basic shapes (ramp waves, etc.) are built-in for continuous changes and can be easily edited. Up to 10 edited sequence data can be saved internally, and can also be saved and read as a CSV file using a USB memory. (Switching between power supply and electronic load is not possible)

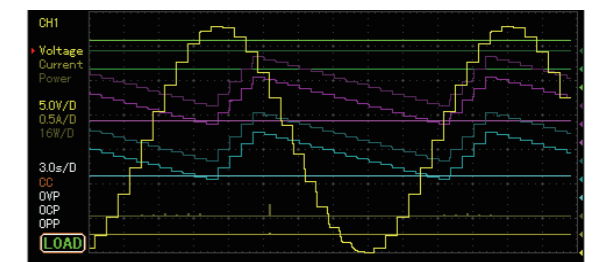| No.	0056	0057	0058	0059	0060	0061
Volt(V)	22.814	22.058	21.289	20.509	19.718	18.921
Curr(A)	0.1000	0.1000	0.1000	0.1000	0.1000	0.1000
Time(s)	0001	0001	0001	0001	0001	0001

Communication interface and programmable I/O

As communication interfaces, RS-232C, USB, LAN, and GP-IB are standard equipment. The programmable I/O for remote control has 5 ports and can be configured as either input or output. When setting input, ON/OFF control of each channel, switching of power supply/electronic load mode, etc. can be controlled with H/L. When setting the output, it is possible to output a signal when the set power status (voltage, current, power, ON/OFF) is met.

Various display functions

The 4.3-inch color LCD screen allows for a variety of displays. In addition to the normal numerical display, it is also possible to display a graph of the output monitor waveform.

Recorder

It has a record function of output voltage and current values for long-term output confirmation. Sampling can be set between 1 and 300 seconds, and a maximum of 204,800 records can be recorded. (When using USB memory)

Recording results can be written to internal memory or USB memory (CSV file).
※This function cannot be used on CH3 of the 3CH Model.

USB power supply port

The 3CH model can be output as a USB power supply port through the USB terminal. (Max 3A)
※When used together with the CH3 power supply terminal, the maximum capacity is 5A including the USB port.

Rear output with remote sensing

The Type 2 model has a rear output terminal with remote sensing function. The power output can be selected from the front terminal or the rear terminal.
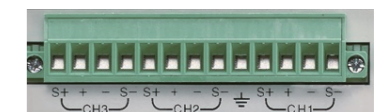
※Housing size Type 2 model

Front/back switching is easy with keys

Front | Rear