

TEXIO

Possible to set flexible range of voltage and current within the rating power.

Available for both vertical and horizontal installation.

Flexible range regulated DC power supply

PSF Series

PSF series is a switching regulated DC power supply performing flexible setting for voltage and current within the max. rating power.

In addition to three output types, 400W single channel, 800W single channel, 400W two channels, 800W current expansion model(Exclusive slave unit) meets wide range of testing applications.

Considering working space, space saving design shortens the depth of the unit.

Also the display panel can be rotated by 90° so that vertical and horizontal installation are selectable according to working space.

Incorporating optional interface boards, GP-IB, RS-232C, and USB, the unit can be controlled by PC.

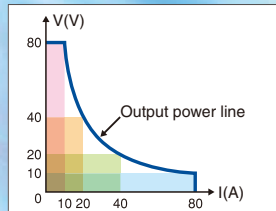


Features

Flexible output range

Possible to output voltage and current flexibly within the rating power.

In case of PSF-800L, 10V/80A to 80V/10A, 20V/40A to 40V/20A, etc. are available corresponding to plural number of conventional regulated DC power supplies.



Sequence function

Stand alone sequence operation is possible sending the sequence made with PC to the unit through optional IF-60GP or IF-60RU interface board.

*Application for making sequence can be downloaded from the home page.

External control

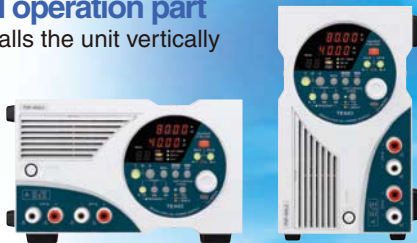
It is possible to set output voltage and current through external voltage or external resistor, and to control output on/off by external contact signal.

Others

Off timer function, 3 point preset function, monitor out function (voltage, current, and status), protection function, delay function (PSF-400L2 only), and tracking function(PSF-400L2 only).

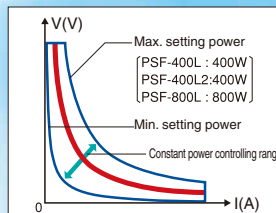
90°rotating panel operation part

90°rotating panel installs the unit vertically or horizontally.



Control of constant power

In addition to constant voltage(CV) and constant current(CC), constant power(CP) is also available for use of supplying arbitrary power or as limit function to protect being added over power to load side.



Parallel/series operation

Including master unit, 4 units in parallel and 2 units in series connection can be controlled by one master unit. Current expansion model(exclusive slave unit) in parallel connection is available.



Options

- IF-60GP GP-IB control board
- IF-60RU RS-232C/USB control board
- OP-21A Horizontal installation connection kit
- OP-21B Vertical installation connection kit
- HK-10 Handle kit

Rating

Output rating

Model name	PSF-400L	PSF-800L	PSF-400L2	PSF-800LS
Rating output voltage	80.00V	80.00V	80.00V×2CH	80.00V
Setting accuracy	0.1%setting±2digit			
Resolution	10mV			
Display accuracy	0.2%reading±2digit			
Rating output current ^{*1}	40.00A	80.00A	40.00A×2CH	
Setting accuracy	0.2%setting±2digit			
Resolution	10mA			
Display Accuracy	0.3%reading±2digit			
Rating output power ^{*2}	400W	800W	400W×2CH	
Setting accuracy	±10W			
Resolution	10W			
Display accuracy	0.5%reading±5digit			

*1: Max. output current on front output terminal is 40A.

*2: Overshoot and ringing may be possible when changing from constant voltage(CV), or constant current(CC) status to constant power(CP) status or in the case of vice versa.

Input rating

Model name	PSF-400L	PSF-800L	PSF-400L2	PSF-800LS
Input voltage	single phase AC100V ~AC240V frequency : 50Hz/60Hz			
Power consumption ^{*3}	560VA	1120VA	1120VA	1120VA
Power factor ^{*4}	0.99			
Rush current	35Amax	70Amax	70Amax	70Amax

*3,4: Max. output current on the front output terminal is 40A at rating output voltage and input rating voltage.

Constant voltage characteristics

Model name	PSF-400L	PSF-800L	PSF-400L2
Line regulation ^{*5}	0.01%±2mV of rating voltage		
Load regulation ^{*6}	0.01%±3mV of rating voltage		
Ripple noise(p-p) ^{*7}	90mV	150mV	90mV
Ripple noise(rms) ^{*8}	4mV	6mV	4mV
Transient response(typ) ^{*9}	1ms	1ms	1ms
Rising time(typ) ^{*10}	50ms (Rating load)		50ms (No load)
Falling time(typ) ^{*11}	100ms (Rating load)		500ms (No load)
Temperature coefficient(typ) ^{*12}	50ppm/°C (after 30 minute warming up)		

Constant current characteristics

Model name	PSF-400L	PSF-800L	PSF-400L2
Line regulation ^{*5}	0.01%±2mA of rating current		
Load regulation ^{*6}	0.02%±3mA of rating current		
Ripple noise(rms)	30mA	60mA	30mA
Temperature coefficient(typ) ^{*12}	100ppm/°C (after 30 minute warming up)		

Constant power characteristics

Model name	PSF-400L	PSF-800L	PSF-400L2
Line regulation ^{*5}	0.5%±10W		

*5: Regulation when changing voltage among AC100V and AC240V.

*6: Regulation when setting rating output voltage, and let load change from rating load to no load(open).

*7: Measurement frequency is up to 20MHz.

*8: Measurement frequency is up to 1MHz.

*9: Responding time that rating output voltage returns to 0.1%±10mV of rating output voltage when setting rating output voltage and changing output current from 50% to 100% of max. output current.

*10: Time that output voltage rises from 10% to 90% of rating output voltage at fixed load.

*11: Time that output voltage falls from 90% to 10% of rating output voltage at fixed load.

*12: Value after 30 minute warming up (except when output controlling)

Function

Constant voltage control(CV) by external voltage	Output voltage: approx. 0V to 80V corresponding to external voltage 0V to 10V.
Constant voltage control(CV) by external resistor	Output voltage: approx. 0V to 80V corresponding to external resistor 0 ohm to 10K ohm.
Constant current control(CC) by external voltage	Output current: approx. 0A to 40A(400L, 400L2), approx. 0A to 80A(800L) corresponding external voltage 0V to 10V.
Constant current control(CC) by external resistor	Output current: approx. 0A to 40A(400L, 400L2), approx. 0A to 80A(800L) corresponding external resistor 0 ohm to 10K ohm.
External ON/OFF control	ON/OFF by contacting Short: ON Open: OFF
Output voltage monitor signal	Approx. 0V to 10V corresponding to 0V to rating output voltage.
Output current monitor signal	Approx. 0V to 10V corresponding to 0V to 10V corresponding to 0A to rating output current.
Constant voltage(CV) status signal	Open collector active LOW
Constant current(CC) status signal	Open collector active LOW
Alarm signal output	Open collector active LOW
Alarm signal input	Short circuit: OUTPUT OFF
Remote sensing function	Compensate 1V for one side (Within rating voltage at current output terminal)
Single control parallel operation	Up to 4 units(except 400L2)
Single control series operation	Up to 2 units(except 400L2)
Pre-set function	Up to 3points
Off timer function(OFF TIMER)	Setting time to output off Setting range: 10 minutes to 99hours 50minutes
High impedance function(Hi-Ω)	Off the internal bleeder function
Delay function(DELAY) ^{*13}	Setting delay time of output Setting range: -9.99s to 10.00s(0.01s resolution)
Tracking function ^{*13}	Possible to change two channels at the same time
Key lock function	Invalidating front panel operation
Sequence function	Simple programming operation by step number, step time, number of cycle, etc.

*13: PSF-400L2 only

Protection function

Over voltage(OVP): Fixed ^{*14}	OUTPUT OFF with 110% of rating output voltage
Over voltage(OVP): Variable ^{*15}	OUTPUT OFF when operating Setting range: 1V to 84V with front panel
Over current(OCP): Fixed ^{*14}	OUTPUT OFF with 110% of rating output current
Over current(OCP): Variable ^{*15}	OUTPUT OFF when operating Setting range: 1A to 42A(84A for 800L) with front panel
Over heat(OHP) ^{*14}	OUTPUT OFF above heat sink setting temperature

*14: Time that output voltage falls to 90% to 10% of the rating output voltage at fixed load. Power switch on for return.

*15: Value after 30 minute warm up(except when using external control). Power switch on or push ESC key for return.

Environment circumstances

Operating temperature range	0°C to 40°C
Operating humidity range	30% to 80% RH (no dew condensation)
Storage temperature range	-20°C to 70°C
Storage humidity range	30% to 80% RH (no dew condensation)

Others

Cooling method	Forced air-cooling with fan motor
Grounding voltage	+/- DC500V
Insulation and withstanding voltage	Between line voltage terminal/unit:AC1500V for one minute Between line voltage terminal/output terminal:AC 2300V for one minute
Insulation resistance	Between line voltage terminal/unit:DC500V above 30M ohm Between line voltage terminal/output terminal:DC500V above 30M ohm Between output terminal/unit:DC500V above 30M ohm
Dimensions	W x H x D : 210mm x 124mm x 290mm
Weight	PSF-400L: Approx. 5Kgs PSF-800L, 400L2, 800LS: Approx. 7Kgs
Accessories	Instruction manual, screw for rear output terminal, rear output insulation cover, front output terminal protection cap, connector(26pin), GND cable, AC power cable.

*Specifications are subject to change without notice.

