#### Programmable Switching D.C. Power Supply



#### **PSH-Series**

CE	RS-232	GPIB	Rear-Panel Output	LabVIEW Driver

#### FEATURES

- \* Wide Input Voltage Range and High Power Factor (P.F)
- \* High Efficiency and High Power Density \* Constant Voltage and Constant Current Operation
- \* Over Voltage , Over Current and
- **Over Temperature Protection**
- \* Self-Test and Software Calibration
- \* Output ON/OFF Control
- \* Low Ripple and Noise
- \* LCD Display

S

**POWER SUPPLIES** 

- \* Built-in Buzzer Alarm
- \* Standard Interface : RS-232C
- \* Optional Interface : GPIB ( IEEE-488.2 )
- \* LabVIEW Driver



#### **Rear Panel**



The PSH-Series are single output from 360 to 1080W, programmable switching DC power supplies. OVP, OCP and OTP protect the power supply and loads from unexpected conditions. Remote sensing adds an extra level of precision by compensating cable losses between loads. The bright LCD with simultaneous parameter outputs allows effortless operation. Self-test and software calibration features also reduce maintenance overheads. SCPI commands and LabVIEW driver access through the RS-232C or the optional GPIB interface allow remote control and ATE software development capability. Modular architecture, dedicated rear-panel output, and the 19 inch 4U rack mounting option ensure that the PSH-Series is optimized for large systems.

		d for large systems.		
OUTPUT	LATIONS			
10V		36A(PSH-1036A)	70A(PSH-1070A)	100A(PSH-10100A)
20V		18A(PSH-2018A)	35A(PSH-2035A)	50A(PSH-2050A)
36V		10A(PSH-3610A)	20A(PSH-3620A)	30A(PSH-3630A)
		6A(PSH-6006A)	12A(PSH-6012A)	18A(PSH-6018A)
60V	10N ( CV )	0A(P3H-0000A)	12A(P3H-0012A)	10A(P3H-0010A)
			<0.10( F. )/	< 0.304 F . 14
Load		$\leq 0.1\%+5mV$	$\leq 0.1\% + 5 \text{mV}$	$\leq 0.1\% + 5mV$
Line		$\leq$ 0.05%+5mV	≤0.05%+5mV	$\leq$ 0.05%+5mV
REGULAT	10N ( CC )	1		1
Load		$\leq$ 0.2%+5mA	<u>≤</u> 0.2%+10mA	$\leq$ 0.2%+15mA
Line		$\leq$ 0.2%+5mA	≤0.2%+10mA	$\leq$ 0.2%+15mA
<b>RIPPLE &amp;</b>	NOISE	1	1	1
Voltage (n	v(rmc)	$\leq$ 10mVrms	$\leq$ 10mVrms	$\leq 10 \text{mVrms}$
Voltage (n		$\leq 100mV/m m 20U = 20MU = 20MU = 100mV/m m 20U = 200MU = 200M$	$\leq$ 100mVp-p 20Hz~20MHz	≤ 100mVp-p 20Hz~20MF
Current (n			$\leq 0.2\% + 20$ mA	$  \leq 0.2\% + 40 \text{ mA}$
RESOLUT		0.276	0.2/0+2011A	0.2/0+40MA
		10.14	10.14	20.14
Voltage	≦36V >36V	10mV	10mV 20mV	10mV
Current	>36V 10V	20mV 10mA	20mV 20mA	20mV 30mA
	20V	10mA	10mA	20mA
	20V 36V	10mA	10mA	10mA
	60V	10mA	10mA	10mA
PROGRAM			101111	
	≤36V	5 0.059(1.25	5.0.050(	5 0.050(
Voltage	36V >36V	$\leq 0.05\% + 25mV$ $\leq 0.05\% + 50mV$	$\leq 0.05\% + 25mV$ $\leq 0.05\% + 50mV$	$\leq 0.05\%+25mV$ $\leq 0.05\%+50mV$
Current	230V 10V	$\leq 0.05\% + 30 \text{mV}$ $\leq 0.2\% + 30 \text{mA}$	$\leq 0.05\% + 50 \text{mV}$ $\leq 0.2\% + 60 \text{mA}$	$\leq 0.05\% + 50mV$ $\leq 0.2\% + 90mA$
current		$\leq 0.2\%+30$ mA $\leq 0.2\%+30$ mA	$\leq 0.2\%$ +60mA $\leq 0.2\%$ +30mA	$\leq 0.2\%$ +90mA $\leq 0.2\%$ +60mA
	20V 36V	$\leq 0.2\%$ +30mA $\leq 0.2\%$ +30mA	$\leq 0.2\%$ +30mA $\leq 0.2\%$ +30mA	$\leq 0.2\%$ +80mA $\leq 0.2\%$ +30mA
	60V	$\leq$ 0.2%+30mA	$\leq$ 0.2%+30mA	$\leq$ 0.2%+30mA
READBAC	K (Meter) RE			
Voltage		Same as Resolution	Same as Resolution	As Resolution
Current		Same as Resolution	Same as Resolution	As Resolution
READBAC	K (Meter) AC	CURACY	1	1
Voltage		Same as Program Accuracy	Same as Program Accuracy	As Program Accuracy
Current		Same as Program Accuracy	Same as Program Accuracy	As Program Accuracy
READBACK	TEMP. COEFFI	CIENT	1	1
Voltage (2	5 <u>+</u> 5℃)	≤ 100ppm/ °C	≤100ppm/ °C	≤100ppm/°C
RESPONS	E ( Rise/Fall )	TIME		·
Voltage U	p(10%~90%)	$\leq$ 150mS( $\leq$ 95% rating load)	$\leq$ 150mS( $\leq$ 95% rating load)	$\leq$ 150mS( $\leq$ 95% rating load
	wn(90%~10%)	$\leq$ 150mS( $\geq$ 10% rating load)	$\leq$ 150mS( $\geq$ 10% rating load)	$\leq$ 150mS( $\geq$ 10% rating loa
-		tep Load Change From 25%~75%		
CV Mode	1 11112 ( 30/03	< 2mS	<pre></pre>	<2mS
		<u></u> 2ms	<u></u> 2m3	<u></u> 2ms
PROTECT		I	[	I
OVP/OCP		V	V	V
Rush Curr	rent	V V	V V	│
OUTPUT (	ON/OFF CONT	ROL		
		V	V	V
INTERFAC	CE			
Standard	: RS-232C; Opt	ional : GPIB		
	SOURCE			
	50V, 50/60Hz			
		HT		
DIMENSI	ONS & WEIG		100.000 142/10 202/20	268.000 142/11 202/51
		108(W)x142(H)x393(D)mm	188(W)x142(H)x393(D)mm	268(W)x142(H)x393(D)mm
		Approx. 3.3kg	Approx. 6.2kg	Approx. 9.3kg
		ORDERING I	NFORMATION	
PSH-1070/ PSH-10100/ PSH-2018/ PSH-2035/ PSH-2050/	<ul> <li>A 700W Program</li> <li>A 1000W Program</li> <li>A 360W Program</li> <li>A 700W Program</li> <li>A 700W Program</li> <li>A 1000W Program</li> </ul>	mable Switching D.C. Power Supply mable Switching D.C. Power Supply mmable Switching D.C. Power Supply mable Switching D.C. Power Supply mmable Switching D.C. Power Supply mmable Switching D.C. Power Supply	PSH-3620A         720W Programmab           PSH-3630A         1080W Programma           PSH-6006A         360W Programmab           PSH-6012A         720W Programmab	le Switching D.C. Power Supply ble Switching D.C. Power Supp le Switching D.C. Power Supply le Switching D.C. Power Supply
ACCESSO User manu	RIES : ual x 1 , Power c	ord x 1		
	GPIB Interface	e ( Factory Installed)		
OPTION	AL ACCESS			
CPA-403	Rack Adapter I			

FREE DOWNLOAD PC Software PC Software including Data Log ; Remote Control Software Driver Labview Driver

GTL-232 RS232C Cable, 9-pin Female to 9-pin, null Modem for Computer

Note : When Opt.01 GPIB interface is ordered, the standard interface RS-232C will be deleted.

GRA-403 Rack Adapter Panel

### Programmable Switching D.C. Power Supply



The PSP-Series are single output, 200W, programmable switching DC power supplies. OVP, OCP, OTP, and OPP protect the PSP-Series and its loads from unexpected conditions. The PSP-Series have large a LCD panel with output and parameter views and a key lock feature to prevent changing the settings. The PSP-Series is suitable for generic bench-top applications in laboratories and educational institutions.

#### PSP-603/405/2010



#### FEATURES

- \* LCD Display
- \* Output ON/OFF Control
- \* 3 Step Fan Speed Control
- \* Voltage/Current/Power Setting
- \* Key Lock to Avoid Error Operation
- \* Normal , +% & -% Output Operation Key
- \* Standard Interface : RS-232C
- \* Optional European Type Jack Terminal

Voltage				
Current				
VOLTAGEREGULATION				
Load				
Line				
CURRENT REGULATION				
Load				
Line				
RIPPLE				
Voltage (mVrms)				
Current (mArms)				
RESOLUTION				
Voltage				
Current				
PROGRAM ACCURACY				
Voltage				
Current				
READBACK (METER) RESOLUTIO				
Voltage Current				
READBACK (METER) ACCURACY				
Voltage				
Current				
PROTECTION				
OVP/OCP/OPP/OTP				
OUTPUT ON/OFF CONTROL				
DISPLAY				
LCD				
INTERFACE (STANDARD)				
RS-232C				
POWER SOURCE				
AC 115V <u>+</u> 10% , AC 230V <u>+</u> 15%, 5				
DIMENSIONS & WEIGHT				
225(W) x 100(H) x 305(D) mm ; Appr				
PSP-603 200W Programmable				
PSP-405 200W Programmable				
PSP-2010 200W Programmable				
ACCESSORIES :				
User manual x 1, Power cord x 1,				
OPTIONAL ACCESSORIES				
GTL-232A RS-232C Cable				
FREE DOWNLOAD				
DC Software DS 232 Pomoto Co				

OUTPUT

Model

#### **Rear Panel**





		1					
PSP-603	PSP-405	PSP-2010					
0 ~ 60V	0 ~ 40V	0 ~ 20V					
0~3.5A	0~5A	0~10A					
<	Z	<					
$\leq 10 \text{mV}$ $\leq 0.05\%$	$\leq$ 10mV $\leq$ 0.05%	$\leq 10 mV$ $\leq 0.05\%$					
_		<u> </u>					
T							
$\leq$ 5mA	$\leq$ 5mA	$\leq$ 5mA					
$\leq$ 5mA $\leq$ 0.05%	$\leq$ 0.05%	$\leq 0.05\%$					
5 00 14	5 00 14	5 00 14					
$\leq 20 mV$ $\leq 10 mA$	$\stackrel{\leq}{=} 20 mV$ $\stackrel{\leq}{=} 10 mA$	$\leq 20 mV$ $\leq 10 mA$					
_ 10mA	_` 10mA	_					
20mV	10mV	10mV					
2mA	2mA	5mA					
		I					
+ 0.05%rdg+4digits	+ 0.05%rdg+ 3digits	± 0.05%rdg± 3digits					
<u>+</u> 0.1%rdg + 5digits	<u>+</u> 0.1%rdg + 5digits	<u>+</u> 0.3%rdg + 10digits					
 ON	,	,					
Same as Resolution	Same as Resolution	Same as Resolution					
Same as Resolution	Same as Resolution	Same as Resolution					
(							
Same as Program Accuracy	Same as Program Accuracy	Same as Program Accuracy					
Same as Program Accuracy	Same as Program Accuracy	Same as Program Accuracy					
- · ·							
V	V	V					
V	V	V					
50/60Hz							
,							
rox 4kg							

#### ORDERING INFORMATION

- Switching DC Power Supply
- Switching DC Power Supply
- Switching DC Power Supply

#### Test lead GTL-104A x 1 , European test lead GTL-204A x 1

PC Software RS-232 Remote Control Software



603/405/2010

PSP

**POWER SUPPLIES** 

## Available from



**CALTEST Instruments Ltd** Specialists in power and instrumentation

# Power sources and test instrumentation solutions

Caltest have been providing power sources and test instrumentation solutions for over 20 years and are proud to represent a number of industry leading manufacturers.

As well as supplying world class power sources and test instrumentation Caltest also has a service centre and UKAS calibration laboratory.

## NEED HELP? CALL US: 01483 302 700

or visit our website for more details

Caltest Instruments Ltd 4 Riverside Business Centre Walnut Tree Close Guildford Surrey GU1 4UG United Kingdom Tel: +44 (0) 1483 302 700 Fax: +44 (0) 1483 300 562 sales@caltest.co.uk www.caltest.co.uk

Sales • Rentals • Service • UKAS Calibration

