Programmable Triple Output Linear DC Power Supplies

1368, 1369, and 1370



Description:

The Performance Series (Models 1368, 1369, 1370) are linear triple output power supplies with fully programmable isolated outputs. These outputs can be adjusted independently or combined in series or parallel to output higher voltage or current. Each model offers a different variable output voltage and current on two channels. The third channel is rated at 6 volts, 5 amps. These supplies offer tracking mode with user-configurable ratios between channels, access to a timer controlled output function, and store/recall on up to 40 instrument settings per channel. Connecting to a PC by USB or RS-232 enables remote instrument control using industry standard protocols.

Features:	Fe	а	t	u	re	es	;;
-----------	----	---	---	---	----	----	----

- Three independent and fully isolated channels
- Series and parallel modes connect channels to maximize output voltage or current
- Fully programmable channels with Output On/Off control
- Simultaneous display of voltage and current settings on all three channels
- High programming and readback resolution of 1 mV / 0.1 mA
- Low ripple, noise, load, and line regulation
- Save and recall up to 40 instrument settings
- USB connector for firmware updates
- Remote sense
- Timer-controlled output function adjustable from 0.1 9999.9 s
- Tracking mode maintains a programmed ratio for connected channels
- PC connection/control through RS-232 or USB supporting standard SCPI commands
- Intelligent fan control, energy saving and noise reduction
- Overvoltage (OVP) and overcurrent (OCP) protection
- Keylock function

Model	1368	1369	1370		
Voltage	0 to 30 V (CH 1 & 2)	0 to 60 V (CH 1 & 2)	0 to 30 V (CH 1 & 2)		
	0 to 6 V (CH 3)	0 to 6 V (CH 3)	0 to 6 V (CH 3)		
Current	0 to 3 A (CH 1 & 2)	0 to 3 A (CH 1 & 2)	0 to 6 A (CH 1 & 2)		
	0 to 5 A (CH 3)	0 to 5 A (CH 3)	0 to 5 A (CH 3)		
Power	210 W	390 W	390 W		

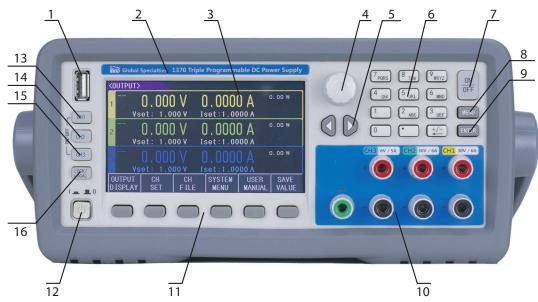
Applications:

- Education
- Research and Design
- Production Testing



Specifications and appearance subject to change without notice D136X00 120919

Front Panel



- 1. USB interface to update firmware
- 2. Model name and number
- 3. LCD display, 480 × 272 pixels, 24-bit color, 4.3-inch color TFT LCD screen
- 4. Adjustment knob, selection tool and fine adjustments
- 5. Arrow keys for moving the cursor
- 6. Numeric keys to input the specific values
- 7. [ON/OFF] key to turn on or off the three channel outputs simultaneously
- 8. [MENU] key for quick access to menu interface

- 9. [ENTER] key to input the data and can be used with the [LOCK/LOCAL] key to take screenshots
- 10. Output terminals, channels 1, 2, and 3 from right to left
- 11. Soft keys to set the display content
- 12. Power switch to power the unit on or off
- 13-15. Output keys to individually turn on each of the channel outputs
- 16. [LOCK/LOCAL] key to lock the keys or switch from remote to local control. Can be used with the [ENTER] key to take screenshots

Rear Panel



- 1. USB Interface for communication by PC via USB DEVICE
- 2. RS-232 Function is same as USB
- 3. Power socket connecting 115/230 V 50 Hz AC power
- 4. Remote test terminal adds same function as output in front panel, 4-terminal sampling function is added for remote sense
- 5. Serial number
- 6. Thermostatically controlled fan



Specifications and appearance subject to change without notice D136X00 120919

2 - www.globalspecialties.com

Operating Modes

Parallel Mode



Parallel mode allows for CH1 + CH2 in parallel, CH2 + CH3 in parallel, or all 3 channels in parallel. When the set voltage is the same the current will sum.



Series Mode

<0UTP	UT>	C	H1+CH2 Ser
1	60.005 V Vset:30.000 V	3.0372 A	182.25 W 00:01:01.3
2	V Vset:30.000 V	A Iset:3.1000 A	0.00 W 00:01:01.3

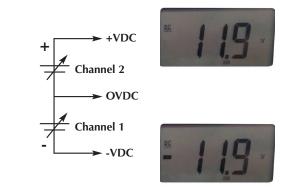
Series modes puts CH1 + CH2 in series. The voltage will sum and the set current is equal.





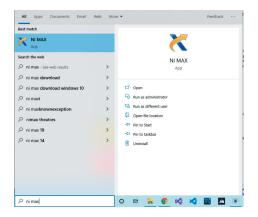
Tracking mode allows for CH1+ CH2 in tracking mode, CH2+CH3 in tracking mode, or all 3 channels in tracking mode. In this mode, the set voltage and current are changed based on current ratio. Before selecting this mode, the voltage and current must be set in advance.

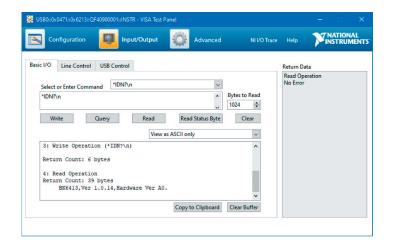
The isolated channels can be set to create positive and negative output voltages simultaneously to power bipolar circuits.



PC Connection

RS-232 and *USB* (TMC and CDC) are available in these power supplies, which can be used for data communication and remote control. These cannot be used at the same time. These power supplies require the free installation of NI-VISA software before connecting the device for the first time. Read and write commands follow standard SCPI protocols.







Specifications and appearance subject to change without notice D136X00 120919

Specifications:

All specifications apply to the unit after a temperature stabilization time of 20 minutes over an ambient range of 20 °C ± 5 °C.

Model			1368		1369			1370		
	Cha	annel	CH1 CH2	CH3	CH1	CH2	CH3	CH1 CH2	CH3	
Rated Output (0°C to 40°C)	Voltage		0 to 30 V 0 to 6 V		0 to 60 V 0 to 6 V		0 to 30 V 0 to 6 V			
	Current		0 to 3 A	0 to 5 A	to 5 A 0 to 3 A		0 to 5 A	0 to 6 A	0 to 5 A	
	Ро	wer	210	210 W 390 W				390 W		
Load Regulation	Vo	tage	≤0.01 % + 3 mV							
± (% Output + Bias)	Cu	rrent	≤0.01 % + 3 mA							
Line Regulation Voltage		≤0.01 % + 3 mV								
± (% Output + Bias)	Cu	rrent	≤0.01 % + 3 mA							
Programming Resolution	Vo	tage	1 mV							
	Current		0.1 mA							
Read-back Value Resolution	Vo	tage	1 mV							
	Cu	rrent	0.1 mA							
Drift (0°C to 40°C) ± (% Output + Bias) per year	Program.	Voltage	≤0.03 % + 10 mV							
		Current	≤0.1% + 5 mA	≤0.1% + 8 mA	$0.1\% + 8 \text{ mA} \le 0.1\% + 5 \text{ mA} \le 0.1\% + 8 \text{ mA} \le 0.1\% + 5 \text{ m/}$				A $\leq 0.1\% + 8 \text{ mA}$	
	Read-	Voltage	≤0.03 % + 10 mV							
	back	Current	≤0.1% + 5 mA	≤0.1% + 8 mA	≤0.1% +	⊦ 5 mA	≤0.1% + 8 mA	≤0.1% + 5 m.	A $\leq 0.1\% + 8 \text{ mA}$	
Ripple and Noise N (20 Hz to 20 MHz)		l Voltage ode	$\leq 3 \text{ mVp-p}$ $\leq 4 \text{ mVp-p}$							
	Normal Current Mode		≤3 mArms	\leq 5 mArms	≤ 4 m/	Arms	≤5 mArms	≤4 mArms	\leq 5 mArms	
Temperature Factor	Vo	ltage	≤0.02 % + 5 mV							
	Current		≤0.1 % + 5 mA							
Series / Parallel Accuracy	Voltage		≤0.02 %	≤0.02 % + 10 mV			≤0.02 % + 5 mV			
Current		≤0.1 % + 20 mA ≤0.1 % + 30 mA								
Timer			0.1 to 99999.9 s							
Memory			4 groups of 40 data sets							

Contact Info:

 Toll Free: 800-572-1028 (US Only)

 Phone: 714-221-9330

 Fax: 714-921-9849

 22820 Savi Ranch Parkway

 Yorba Linda, CA 92887-4610 USA

 www.globalspecialties.com

Specifications and appearance subject to change without notice D136X00 120919

4 - www.globalspecialties.com

CE

Copyright © 2019, Cal Test Electronics, Inc. All rights reserved. Information in this publication supersedes that in all previously published material. Trade names referenced are the service marks, trademarks or registered trademarks of their respective companies.



X-ON Electronics

Largest Supplier of Electrical and Electronic Components

Click to view similar products for Benchtop Power Supplies category:

Click to view products by Global Specialties manufacturer:

Other Similar products are found below :

 NL200
 PR20
 ZUPNC403
 ZUP/W
 Z60-7-L-U
 ZUPNC402
 TL89F2
 TL89F1
 1332A-NIST
 CPX200DP
 AX-3003P
 AX-6003P

 AX-8450A
 TPM-3003
 HMC8012
 HMP2020
 HMP2030
 HMP4040
 1350
 UT804
 1410
 1513
 1514
 1550
 1651A
 1666
 1693
 1694

 1698
 MX100TP
 1739
 1762
 1788
 TPM-3005
 1902B
 GDM-8245
 GDM-8255A
 GDM-8341
 PSP-603
 PSW 160-7.2
 QL355P SII
 HCS

 3400-USB
 MX180TP
 382276
 1403
 RK153
 9183B