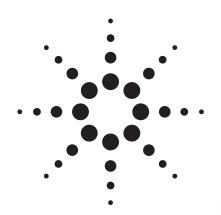


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Agilent Models 6690A-6692A System dc Power Supply

Data Sheet



Minimize your testing downtime with this reliable, high power dc supply

- · Low ripple & noise
- Fast up-and-down programming
- High accuracy current programming and read back
- Industry standard SCPI programming commands
- Analog programming
- · Analog monitoring
- · Parallel connection for more current output
- Full protection from overcurrent, overvoltage overtemperature
- · Remote sense
- · Electronic calibration
- · Standard 1-year warranty



You have better things to worry about than dc power.

Will failure of your dc power supply delay your testing?

Will failure of your dc power supply damage your DUT?

Will failure of your dc power supply keep you from meeting your customers' needs?

The 6690A Series is dc power you can depend on.

At the 6600 watt power level, it's not easy to design a reliable dc power supply. Agilent Technologies builds in ruggedness and durability, to meet even the grueling needs of continuous stress testing in harsh environments. During the development phase, Agilent power supplies undergo a battery of environmental tests such as 8-days temperature profile. Other tests include humidity, altitude, shock and vibration, ESD, ac line tests, EMC and RFI. The power supplies are designed with built-in margin so that they can meet their specifications over time, under all conditions, and withstand peak stress.

Protect your DUT

At these high power levels, you want to protect your expensive DUT. Whether your DUT is a rack of data storage control units, or a base station ready for deployment, it is quite valuable and well worth recovery. The 6690 Series has a wide range of protection features available to protect your DUT from damaging conditions.

- Overvoltage protection
- Overcurrent protection
- Overtemperature protection
- · Programmable shut-down
- Error status reporting
- DFI-RI
- External TTL shut-down input
- Linked power supply shutdown

Easy GPIB Programming

All Agilent system power supplies have SCPI (Standard Commands for Programmable Instruments) based command sets. This means that the same function would have the same command for any instrument. For example, to program the output voltage on two power supplies, the command would be the same, and to measure the output voltage the command would be the same for the Agilent system power supply as any SCPI voltmeter. Using SCPI instruments makes your software simpler and quicker to design.

Easy System Configuration and Enhancement

The 6600 watt dc power supplies of the Agilent 6690 Series are the same size as the 5000 watt power supplies of the Agilent 6680 Series. This means that system power can be upgraded without needing more rack space. All programming commands and

features are 100% compatible between both series. Also, up to three same model 6690 Series power supplies can be connected in parallel, to provide additional power as your needs expand.

Manual Power Supply Control

Non-automated testing in R&D, or power for the repair bench in manufacturing, are no problem for the 6690 Series. The front panel has everything that is needed to control both the power supply output and the associated protection features. Both the output voltage and current can be easily monitored on the front panel meters.

Analog Programming and Monitoring

Analog signals can be used to program the output voltage and current. This allows custom waveforms to be generated, and is also useful for process control applications. The output current and voltage can be monitored via analog signals on the rear panel, for custom interface applications, and process control implementations.

ululli	eter		Agilent Mo 6690A	del Number 6691A	6692A
Output	t Ratings				
	Voltage:		0-15 V	0-30 V	0-60 V
	Current:* *Derated linearly 1%/ 40°C to 55°C	°C from	0-440 A	0-220 A	0-110 A
rogran	mming Accuracy (@ 25	±5°C)			
	Voltage:	0.04% +	15 mV	30 mV	60 mV
	Current:	0.1%+	230 mA	125 mA	65 mA
	(from 20 Hz to 20 MHz outputs ungrounded, of either output terminal	or with grounded)	05 W	05 V	45. V
	Constant Voltage:	rms	2.5 mV	2.5 mV	1.5 mV
	Constant Voltage:	p-p	15 mV	25 mV	25 mV
Readba	Constant Current:** **With load inductance ack Accuracy	<u>·</u>	200 mA	50 mA	30 mA
Readb	**With load inductand	e >5 μH. ver GPIB	200 mA	50 mA	30 mA
Readb	**With load inductance ack Accuracy (from front panel or over with respect to actual @ 25 ±5°C)	e >5 μH. ver GPIB output			
	**With load inductance ack Accuracy (from front panel or over with respect to actual @ 25 ±5°C) Voltage:	e >5 μH. Ver GPIB output 0.05% + 0.1% +	22.5 mV	45 mV	90 mV
	**With load inductance ack Accuracy (from front panel or over with respect to actual @ 25 ±5°C) Voltage: ±Current: Regulation (change in output volt current for any load cl	e >5 μH. Ver GPIB output 0.05% + 0.1% +	22.5 mV	45 mV	90 mV
	**With load inductance ack Accuracy (from front panel or over with respect to actual @ 25 ±5°C) Voltage: ±Current: Regulation (change in output volt current for any load cleanings)	e >5 μH. Ver GPIB output 0.05% + 0.1% + age or nange	22.5 mV 300 mA	45 mV 165 mA	90 mV 80 mA
Load R	**With load inductance ack Accuracy (from front panel or over with respect to actual @ 25 ±5°C) Voltage: ±Current: Regulation (change in output volt current for any load cleaning) Voltage	ee >5 μH. ver GPIB output 0.05% + 0.1% + age or nange 0.002% + 0.005% +	22.5 mV 300 mA	45 mV 165 mA	90 mV 80 mA
Load R	**With load inductance ack Accuracy (from front panel or over with respect to actual @ 25 ±5°C) Voltage: ±Current: Regulation (change in output volt current for any load clean within ratings) Voltage Current: egulation (change in output volt within ratings)	ee >5 μH. ver GPIB output 0.05% + 0.1% + age or nange 0.002% + 0.005% +	22.5 mV 300 mA	45 mV 165 mA	90 mV 80 mA

Agilent Technologies' Test and Measurement Support, Services, and Assistance

Agilent Technologies aims to maximize the value you receive, while minimizing your risk and problems. We strive to ensure that you get the test and measurement capabilities you paid for and obtain the support you need. Our extensive support resources and services can help you choose the right Agilent products for your applications and apply them successfully. Every instrument and system we sell has a global warranty. Support is available for at least five years beyond the production life of the product. Two concepts underlie Agilent's overall support policy: "Our Promise" and "Your Advantage."

Our Promise

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Your Advantage

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