DP5700 Series DC Power Supplies

Introduction

The Keysight DP5700 Series DC power supplies are compact and secure, delivering the right performance in space-constrained lab and production environments. The series includes 40 single-output programmable models, with 1.5 kW units in half-rack width and 3.4 kW units in full-rack width, both only 1U high. They provide stable output with built-in voltage and current measurements, with operating ranges up to 600 V / 150 A (on the 1.5 kW models) and 600 V / 340 A (on the 3.4 kW models).

The DP5700 Series is equipped with a removable SD memory, which supports sensitive security applications, enabling safe movement of test equipment between confidential spaces.





Table of Contents

Compact and Secure — High-Density DC Power Supplies	3
Specifications – 1.5 kW Models	6
Supplemental Characteristics – 1.5kW Models	8
Specifications for 3.4 kW Models	10
Supplemental Characteristics for 3.4 kW Models	12
Common Characteristics	14
Dimension Diagram	16
Options for Single-Phase Models	17
Accessories	17
Keysight's IO Libraries Suite	17
Keysight Services	18



Compact and Secure — High-Density DC Power Supplies

The DP5700 Series DC power supplies are equipped with many system-ready features, including multiple standard I/O interfaces, to simplify and accelerate test-system development. These high-density power supplies are compact and secure, designed to maximize space efficiency in lab and production environments. Flexible system scaling is possible by connecting up to four units in parallel to increase current or two in series to increase voltage.

The DP5700 Series DC power supplies offer the following features:

- Small high-density 1U package.
- Built-in voltage and current measurements.
- Comprehensive protection from overvoltage and overcurrent.
- Single-phase 100 240 VAC universal input for 1.5 kW models .
- Single- and three-phase 200 240 VAC, and three-phase 380 480 VAC universal input for 3.4 kW models.
- Standard LAN, USB, and GPIB interfaces.
- Full compliance with the LXI Class C specification.
- Removable SD card option for added security.

10 Models of 1.5 kW Models (Up to 600 V and 150 A)	30 Models of 3.4 kW Models (Up to 600 V and 340 A)
DP5721A	DP5741AS, DP5741AL, DP5741AH,
DP5722A	DP5742AS, DP5742AL, DP5742AH,
DP5723A	DP5743AS, DP5743AL, DP5743AH,
DP5724A	DP5744AS, DP5744AL, DP5744AH,
DP5726A	DP5746AS, DP5746AL, DP5746AH,
DP5728A	DP5748AS, DP5748AL, DP5748AH,
DP5730A	DP5750AS, DP5750AL, DP5750AH,
DP5731A	DP5751AS, DP5751AL, DP5751AH,
DP5733A	DP5753AS, DP5753AL, DP5753AH,
DP5736A	DP5756AS, DP5756AL, DP5756AH



Compact, High-Density Form Factor Saves Rack Space

The DP5700 Series delivers up to 1.5 kW in a 1U half-rack width size and 3.4 kW in a 1U full-rack size, with front and rear air vents. This compact design allows other instruments to be stacked directly above or below without obstructing airflow.

Intuitive Front-Panel Operation

The DP5700 Series offers quick and intuitive operation through rotary knobs and buttons. Front-panel controls support coarse and fine adjustments to voltage, current, protection settings, and power-on states (state 0). Voltage and current are displayed simultaneously, while the LED indicators show the operating status and modes. The controls can be locked to prevent accidental parameter changes.



Figure 1. Front-panel control knobs and buttons make it easy to use Keysight DP5700 power supplies.

Extensive Device Protection

To safeguard devices from damage, the DP5700 Series power supplies provide Overtemperature Protection (OTP), Overcurrent Protection (OCP), and Overvoltage Protection (OVP), shutting down the output when a fault occurs. They also include Undervoltage Protection (UVP) to prevent voltage adjustment below a set limit. Combined, UVP and OVP create a protection window for sensitive load circuitry.

Simplify System Connections

The DP5700 Series power supplies include standard GPIB, LAN, and USB 2.0 interfaces, providing flexibility in I/O selection across test systems. The series is fully compliant with the LXI Class C specification.



Removable SD Card Option

All DP5700 models include a removable SD card option for secure data handling in classified environments. This option supports equipment sanitization and enables detailed record-keeping of cleaning and sanitization processes, including the methods and materials used, to maintain a clear audit trail and ensure accountability.

Easy System Integration and Configuration

The DP5700 Series supports Standard Commands for Programmable Instruments (SCPI) and includes IVI.NET drivers to simplify system development.

Flexible Configuration: Connect Multiple Units in Parallel and Series

For applications requiring higher power, the DP5700 Series delivers up to 3.4 kW per unit. Up to four units of the same rating 3.4 kW units can be connected in parallel for greater current, or two in series for greater voltage (see output terminal isolation information).

Analog Programming and Monitoring

Voltage and current can be programmed from zero to full scale using either an analog voltage of 0 – 5 V / 0 – 10 V or a resistance of 0 – 5 k Ω / 0 – 10 k Ω . This capability also enables monitoring of voltage and current signals.

Universal AC Input

All DP5700 Series 1.5 kW models feature universal AC input, enabling operation worldwide from single-phase 100 – 240 VAC without switches or fuse changes. For 3.4 kW models, the AC input is 200 – 240 VAC (single-phase) or 200–240 VAC / 380–480 VAC (three-phase).

Optional Rack Mounting

The optional rack-mount slide kits provide the hardware required to install the DP5700 Series power supply into a test rack. For more information, see the Accessories table on page 16.



Specifications – 1.5 kW Models

Unless otherwise noted, specifications are warranted over the ambient temperature range of 0 to 40 °C after a 30-minute warm-up period. Specifications apply at the output terminals, with the power supply in local sensing mode.

Refer to the Keysight DP5700 Series documentation for the setup conditions for all performance specifications.

For more detailed specifications, refer to the DP5700 Series user manual at www.keysight.com/find/DP5700.

Keysight Models DP5721A - DP5726A

Model	DP5721A	DP5722A	DP5723A	DP5724A	DP5726A
DC Power Ratings					
Voltage	0 – 10 V	0 - 20 V	0 – 30 V	0 – 40 V	0 – 60 V
Current	0 – 150 A	0 – 75 A	0 – 50 A	0 – 38 A	0 – 25 A
Power	1.5 kW	1.5 kW	1.5 kW	1.52 kW	1.5 kW
Output Ripple and Nois	se ¹				
CV rms	6 mV	6 mV	6 mV	7 mV	7 mV
CV peak-to-peak	50 mV	50 mV	50 mV	60 mV	60 mV
Load Regulation					
Voltage	3 mV	4 mV	5 mV	6 mV	8 mV
Current	35 mA	20 mA	15 mA	12.6 mA	10 mA
Line Regulation					
Voltage	1 mV	2 mV	3 mV	4 mV	6 mV
Current	17 mA	9.5 mA	7 mA	5.8 mA	4.5 mA
Voltage Programming	Accuracy ²				
Voltage	≤ 5 mV	≤ 10 mV	≤ 15 mV	≤ 20 mV	≤ 30 mV
Current Programming	Accuracy ^{2, 3}				
Current 0.1%+	300 mA	150 mA	100 mA	76 mA	50 mA
Voltage Measurement	Accuracy ²				
Voltage	≤ 5 mV	≤ 10 mV	≤ 15 mV	≤ 20 mV	≤ 30 mV
Current Measurement	Accuracy ²				
Current	≤ 300 mA	≤ 150 mA	≤ 100 mA	≤ 76 mA	≤ 50 mA
Transient Response 4					
Recovery time	≤ 1 ms	≤ 1 ms	≤ 1 ms	≤ 1 ms	≤ 1 ms
Settling band	0.05 V	0.1 V	0.15 V	0.2 V	0.3 V

^{1.} From 5 Hz to 1 MHz for rms noise; from 20 Hz to 20 MHz for peak-to-peak noise.



^{2.} Accuracy specifications are warranted at 23° C ± 5° C

^{3.} Percent of programmed value + offset.

^{4.} Time for output voltage to recover within 1% of its rated output for a load change from 10% to 90% and 90% to 10% of its rated output current.

Keysight Models DP5728A - DP5736A

Model	DP5728A	DP5730A	DP5731A	DP5733A	DP5736A
DC Power Ratings					
Voltage	0 – 80 V	0 – 100 V	0 – 150 V	0 – 300 V	0 – 600 V
Current	0 – 19 A	0 – 15 A	0 – 10 A	0 – 5 A	0 – 2.6 A
Power	1.52 kW	1.5 kW	1.5 kW	1.5 kW	1.56 kW
Output Ripple and Noise	e ¹				
CV rms	8 mV	30 mV	20 mV	45 mV	100 mV
CV peak-to-peak	75 mV	130 mV	75 mV	180 mV	500 mV
Load Regulation					
Voltage	10 mV	12 mV	17 mV	32 mV	62 mV
Current	8.8 mA	8 mA	7 mA	6 mA	5.52 mA
Line Regulation					
Voltage	8 mV	10 mV	15 mV	30 mV	60 mV
Current	3.9 mA	3.5 mA	3 mA	2.5 mA	2.26 mA
Voltage Programming A	Accuracy ²				
Voltage	≤ 40 mV	≤ 50 mV	≤ 75 mV	≤ 150 mV	≤ 300 mV
Current Programming A	Accuracy 2, 3				
Current 0.1%+	38 mA	30 mA	20 mA	10 mA	5.2 mA
Voltage Measurement A	Accuracy ²				
Voltage	≤ 40 mV	≤ 50 mV	≤ 75 mV	≤ 150 mV	≤ 300 mV
Current Measurement A	Accuracy ²				
Current	≤ 38 mA	≤ 30 mA	≤ 20 mA	≤ 10 mA	≤ 5.2 mA
Transient Response 4					
Recovery time	≤ 1 ms	≤ 1 ms	≤ 2 ms	≤ 2 ms	≤ 2 ms
Setting band	0.4 V	0.5 V	0.75 V	1.5 V	3 V

^{1.} From 5 Hz to 1 MHz for rms noise; from 20 Hz to 20 MHz for peak-to-peak noise. 2. Accuracy specifications are warranted at 23° C \pm 5° C



^{3.} Percent of programmed value + offset.

^{4.} Time for output voltage to recover within 1% of its rated output for a load change from 10% to 90% and 90% to 10% of its rated output current.

Supplemental Characteristics – 1.5 kW Models

Supplemental characteristics are not warranted but are descriptions of performance determined by design or type testing. All supplemental characteristics are typical unless otherwise noted.

Keysight Models DP5721A - DP5726A

Model	DP5721A	DP5722A	DP5723A	DP5724A	DP5726A
Output Respons	se Time				
Up, full load	20 ms	20 ms	20 ms	20 ms	20 ms
Down, full load	20 ms	20 ms	20 ms	30 ms	30 ms
Down, no load	300 ms	500 ms	600 ms	900 ms	1,200 ms
Remote Sense	Compensation/Wire *	(V) ¹			
	2	2	5	5	5
Overvoltage Pro	otective Accuracy				
	0.1 V	0.2 V	0.3 V	0.4 V	0.6 V
Overvoltage Pro	otection Range				
	0.5 – 12 V	1 – 24 V	2 – 36 V	2 – 44.1 V	5 – 66.15 V
Output Ripple a	nd Noise ²				
(1-phase)	<= 250 mA	<= 130 mA	<= 100 mA	<= 60 mA	<= 50 mA
Programming R	esolution				
Voltage	0.2 mV	0.4 mV	0.6 mV	0.8 mV	1.2 mV
Current	3.75 mA	1.875 mA	1.25 mA	0.95 mA	0.625 mA
Measurement R	esolution				
Voltage	1.1 mV	1.2 mV	1.2 mV	1.2 mV	1.2 mV
Current	15 mA	1.5 mA	1.5 mA	1.14 mA	1.25 mA
Front Panel Disp	olay Accuracy (4 Digi	ts +/- 1 Count)			
Voltage	5 mV	10 mV	15 mV	20 mV	30 mV
Current	300 A	150 mA	100 mA	76 mA	50 mA
Temperature St	Temperature Stability ³				
Voltage	1 mV	2 mV	3 mV	4 mV	6 mV
Current	15 mA	7.5 mA	5 mA	3.8 mA	2.5 mA
Temperature Co	pefficient (ppm/C) 4				
Voltage	50	50	50	50	50
Current	100	100	100	100	100

^{1.} The maximum voltage on the power supply terminals must not exceed the rated voltage.

^{2.} From 5 Hz to 1 MHz for rms noise.

^{3.} Temperature stability applies over 8 hrs interval following 30 minutes of warm-up. Constant line, load, and temperature.

^{4.} Temperature coefficient applies following 30-minute warm-up period.

Keysight Models DP5728A - DP5736A

Model	DP5728A	DP5730A	DP5731A	DP5733A	DP5736A
Output Respons	se Time				
Up, full load	20 ms	20 ms	30 ms	30 ms	40 ms
Down, full load	50 ms	50 ms	60 ms	70 ms	80 ms
Down, no load	1,300 ms	1,700 ms	2,200 ms	2,700 ms	3,000 ms
Remote Sense	Compensation/Wire *	(V) ¹			
	5	5	5	5	5
Overvoltage Pro	otective Accuracy				
	0.8 V	1 V	1.5 V	3 V	6 V
Overvoltage Pro	otection Range				
	5 – 88.2 V	5 – 110.25 V	5 – 165.37 V	5 – 330.75 V	5 – 661.5 V
Output Ripple a	nd Noise ²				
(1-phase)	<= 30 mA	<= 40 mA	<= 10 mA	<= 8 mA	<= 5 mA
Programming R	esolution				
Voltage	1.6 mV	2 mV	3 mV	6 mV	12 mV
Current	0.475 mA	0.375 mA	0.25 mA	0.125 mA	0.065 mA
Measurement R	esolution				
Voltage	1.6 mV	11 mV	10.5 mV	12 mV	12 mV
Current	1.14 mA	1.05 mA	1.5 mA	0.15 mA	0.104 mA
Front Panel Disp	olay Accuracy (4 Digi	ts +/- 1 Count)			
Voltage	40 mV	50 mV	75 mV	150 mV	300 mV
Current	38 mA	30 mA	20 mA	10 mA	5.2 mA
Temperature St	ability 3				
Voltage	8 mV	10 mV	15 mV	30 mV	60 mV
Current	1.9 mA	1.5 mA	1 mA	0.5 mA	0.26 mA
Temperature Co	pefficient (ppm/C) 4				
Voltage	50	50	50	50	50
Current	100	100	70	70	70

^{1.} The maximum voltage on the power supply terminals must not exceed the rated voltage.



From 5 Hz to 1 MHz for rms noise.
 Temperature stability applies over an 8-hour interval following 30 minutes of warm-up. Constant line, load & temperature.

^{4.} Temperature coefficient applies following 30-minute warm-up period.

Specifications for 3.4 kW Models

Unless otherwise noted, specifications are warranted over the ambient temperature range of 0 to 40 °C after a 30-minute warm-up period. Specifications apply at the output terminals, with the sense terminals connected to the output (local sensing) terminals.

Refer to the Keysight DP5700 Series documentation for the setup conditions for all performance specifications.

For more detailed specifications, refer to the DP5700 Series user manual at www.keysight.com/find/DP5700.

Keysight Models DP5741AS/L/H - DP5746AS/L/H

Model	DP5741AS DP5741AL DP5741AH	DP5742AS DP5742AL DP5742AH	DP5743AS DP5743AL DP5743AH	DP5744AS DP5744AL DP5744AH	DP5746AS DP5746AL DP5746AH
DC Power Ratings					
Voltage	0 to 10 V	0 to 20 V	0 to 30 V	0 to 40 V	0 to 60 V
Current	0 to 340 A	0 to 170 A	0 to 112 A	0 to 85 A	0 to 56 A
Power	3,400 W	3,400 W	3,360 W	3,400 W	3,360 W
Output Ripple and Nois	se ¹				
CV rms	8 mV	10 mV	10 mV	12 mV	15 mV
CV peak-to-peak	75 mV	75 mV	75 mV	75 mV	80 mV
Load Regulation					
Voltage	6 mV	7 mV	8 mV	9 mV	11 mV
Current	272 mA	136 mA	89.6 mA	68 mA	44.8 mA
Line Regulation					
Voltage	1 mV	2 mV	3 mV	4 mV	6 mV
Current	170 mA	85 mA	56 mA	42.5 mA	28 mA
Voltage Programming	Accuracy ²				
Voltage	5 mV	10 mV	15 mV	20 mV	30 mV
Current Programming	Accuracy ^{2, 3}				
Current 0.1% +	680 mA	340 mA	224 mA	170 mA	112 mA
Voltage Measurement	Accuracy ²				
Voltage	5 mV	10 mV	15 mV	20 mV	30 mV
Current Measurement	Accuracy ²				
Current	680 mA	340 mA	224 mA	170 mA	112 mA
Transient Response 4					
Recovery time	1 ms				
Setting band	0.05 V	0.1 V	0.15 V	0.2 V	0.3 V

^{1.} From 5 Hz to 1 MHz for rms noise; from 20 Hz to 20 MHz for peak-to-peak noise.



^{2.} Accuracy specifications are warranted at 23° C ± 5° C

^{3.} Percent of programmed value + offset.

^{4.} Time for output voltage to recover within 0.5% of its rated output for a load change from 10% to 90% and 90% to 10% of its rated output current.

Keysight Models DP5748AS/L/H – DP5756AS/L/H

	DP5748AS	DP5750AS	DP5751AS	DP5753AS	DP5756AS
Model	DP5748AL	DP5750AL	DP5751AL	DP5753AL	DP5756AL
	DP5748AH	DP5750AH	DP5751AH	DP5753AH	DP5756AH
DC Power Ratings					
Voltage	0 to 80 V	0 to 100 V	0 to 150 V	0 to 300 V	0 to 600 V
Current	0 to 42 A	0 to 34 A	0 to 22.5 A	0 to 11.5 A	0 to 5.6 A
Power	3,360 W	3,400 W	3,375 W	3,450 W	3,360 W
Output Ripple and N	loise ¹				
CV rms	15 mV	15 mV	20 mV	60 mV	100 mV
CV peak-to-peak	80 mV	100 mV	120 mV	200 mV	480 mV
Load Regulation					
Voltage	13 mV	15 mV	20 mV	35 mV	65 mV
Current	33.6 mA	27.2 mA	18 mA	9.2 mA	4.48 mA
Line Regulation					
Voltage	8 mV	10 mV	15 mV	30 mV	60 mV
Current	21 mA	17 mA	11.25 mA	5.75 mA	2.8 mA
Voltage Programmir	ng Accuracy ²				
Voltage	40 mV	50 mV	75 mV	150 mV	300 mV
Current Programmir	ng Accuracy 2,3				
Current 0.1% +	84 mA	68 mA	45 mA	23 mA	11.2 mA
Voltage Measureme	ent Accuracy 2				
Voltage	40 mV	50 mV	75 mV	150 mV	300 mV
Current Measureme	ent Accuracy 2				
Current	84 mA	68 mA	45 mA	23 mA	11.2 mA
Transient Response	4				
Recovery time	1 ms	1 ms	2 ms	2 ms	2 ms
Setting band	0.4 V	0.5 V	0.75 V	1.5 V	3 V

^{1.} From 5 Hz to 1 MHz for rms noise; from 20 Hz to 20 MHz for peak-to-peak noise. 2. Accuracy specifications are warranted at 23° C \pm 5° C



^{3.} Percent of programmed value + offset.

^{4.} Time for output voltage to recover within 0.5% of its rated output for a load change from 10% to 90% and 90% to 10% of its rated output current.

Supplemental Characteristics for 3.4 kW Models

Supplemental characteristics are not warranted but are descriptions of performance determined by design or type testing. All supplemental characteristics are typical unless otherwise noted.

Keysight models DP5741AS/L/H - DP5746AS/L/H

Model	DP5741AS DP5741AL DP5741AH	DP5742AS DP5742AL DP5742AH	DP5743AS DP5743AL DP5743AH	DP5744AS DP5744AL DP5744AH	DP5746AS DP5746AL DP5746AH
Output Respons	se Time				
Up, full load	30 ms	30 ms	30 ms	30 ms	50 ms
Down, full load	50 ms	50 ms	80 ms	80 ms	80 ms
Down, no load	450 ms	600 ms	800 ms	900 ms	1,100 ms
Remote Sense (Compensation/Wire *	(V) ¹			
	2	2	5	5	5
Overvoltage Pro	otective Accuracy				
	0.1 V	0.2 V	0.3 V	0.4 V	0.6 V
Overvoltage Pro	otection Range				
	0.5 – 12 V	1 – 24 V	2 – 36 V	2 – 44.1 V	5 – 66.15 V
Output Ripple a	nd Noise ²				
(1-phase)	<= 800 mA	<= 450 mA	<= 300 mA	<= 150 mA	<= 100 mA
(3-phase)	<= 1,200 mA	<= 600 mA	<= 300 mA	<= 300 mA	<= 200 mA
Programming R	esolution				
Voltage	0.2 mV	0.4 mV	0.6 mV	0.8 mV	1.2 mV
Current	6.8 mA	3.4 mA	2.24 mA	1.7 mA	1.12 mA
Measurement R	Resolution				
Voltage	1.1 mV	1.2 mV	1.2 mV	1.2 mV	1.2 mV
Current	1.36 mA	1.19 mA	1.12 mA	1.7 mA	1.68 mA
Front Panel Disp	play Accuracy (4 Digi	ts +/- 1 Count)			
Voltage	5 mV	10 mV	15 mV	20 mV	30 mV
Current	680 mA	340 mA	224 mA	170 mA	112 mA
Temperature St	ability ³				
Voltage	1 mV	2 mV	3 mV	4 mV	6 mV
Current	3.4 mA	17 mA	11.2 mA	8.5 mA	5.6 mA
Temperature Co	pefficient (ppm/C) 4				
Voltage	50	50	50	50	50
Current	100	100	100	100	100

^{1.} The maximum voltage on the power supply terminals must not exceed the rated voltage.



^{2.} From 5 Hz to 1 MHz for rms noise.

^{3.} Temperature stability applies over an 8-hour interval following 30 minutes of warm-up. Constant line, load & temperature.

^{4.} Temperature coefficient applies following 30-minute warm-up period.

Keysight Models DP5748AS/L/H – DP5756AS/L/H

Model	DP5748AS DP5748AL	DP5750AS DP5750AL	DP5751AS DP5751AL	DP5753AS DP5753AL	DP5756AS DP5756AL
	DP5748AH	DP5750AH	DP5751AH	DP5753AH	DP5756AH
Output Respons	se Time				
Up, full load	50 ms	50 ms	50 ms	50 ms	100 ms
Down, full load	100 ms	100 ms	100 ms	100 ms	200 ms
Down, no load	1,300 ms	2,100 ms	2,000 ms	3,200 ms	3,100 ms
Remote Sense C	Compensation/Wire *	(V) ¹			
	5	5	5	5	5
Overvoltage Pro	tective Accuracy				
	0.8 V	1 V	1.5 V	3 V	6 V
Overvoltage Pro	otection Range				
	5 – 88.2 V	5 – 110.25 V	5 – 165.37 V	5 – 330.75 V	5 – 661.5 V
Output Ripple a	nd Noise ²				
(1-phase)	<= 70 mA	<= 45 mA	<= 30 mA	<= 12 mA	<= 5 mA
(3-phase)	<= 100 mA	<= 60 mA	<= 40 mA	<= 12 mA	<= 8 mA
Programming R	esolution				
Voltage	1.6 mV	2 mV	3 mV	6 mV	12 mV
Current	0.85 mA	0.68 mA	0.45 mA	0.23 mA	0.112 mA
Measurement R	esolution				
Voltage	1.6 mV	11 mV	10.5 mV	12 mV	12 mV
Current	1.68 mA	1.36 mA	1.35 mA	1.15 mA	0.168 mA
Front Panel Disp	olay Accuracy (4 Digi	ts +/- 1 Count)			
Voltage	40 mV	50 mV	75 mA	150 mV	300 mV
Current	84 mA	68 mA	45 mA	23 mA	11.2 mA
Temperature St	ability ³				
Voltage	8 mV	10 mV	15 mV	30 mV	60 mV
Current	4.2 mA	3.4 mA	2.25 mA	1.15 mA	0.56 mA
Temperature Co	pefficient (ppm/C) 4				
Voltage	50	50	50	50	50
Current	100	100	70	70	70

^{1.} The maximum voltage on the power supply terminals must not exceed the rated voltage.



^{2.} From 5 Hz to 1 MHz for rms noise.

^{3.} Temperature stability applies over an 8-hour interval following 30 minutes of warm-up. Constant line, load, and temperature.

^{4.} Temperature coefficient applies following 30-minute warm-up period.

Common Characteristics

Characteristic	All Models
Command response time	< 10 ms
Savable states	10
Analog Programming	
Input range	0 to 5 V or 0 to 10 V (selectable)
Accuracy	Specified instrument accuracy ±0.2% of rating
Input impedance	150 k Ω (referenced to ground)
Computer Interface	
LXI version	1.5 LXI Device Specification 2023
LXI extended functions	LXI IPv4, LXI HiSLIP, LXI VXI VXI-11 Discovery and Identification
LAN	10/100 Base-T Ethernet (sockets, VXI-11 protocol, web user interface)
USB	USB 2.0 (USB-TMC488 protocol)
GPIB	IEEE 488
Language	SCPI-1999, IEEE 488.2 compliant
Regulatory Compliance	
EMC	Complies with the European EMC Directive for test and measurement products Complies with Australian standards and carries the C-Tick mark This ISM device complies with Canadian ICES-001 Cet appareil ISM est conforme à la norme NMB-001 du Canada
Safety	Complies with the European Low Voltage Directive and carries the CE-marking. Conforms to US and Canadian safety regulations. Not applicable for IT mains supply systems
Environmental	
Operating environment	Indoor use, installation category II (for AC input), pollution degree 2
Temperature range	0 °C to 40 °C
Relative humidity	20 to 90% (non-condensing)
Storage humidity	10 to 90% (non-condensing)
Altitude	Up to 3000 meters, with 2% output current derating for every 100's above 2000 m, and derating maximum ambient temperature by 1 °C per every 100's above 2000 m
Non-operating altitude	Up to 12,000 m
Storage temperature	−30 °C to 85 °C



Acoustic statement

Acoustic Statement

1.5 kW Models' Acoustic Noise Emission		
At max fan speed	LpA 59.2 dB at Operator Position LpA 52.0 dB at Bystander Position	
At idle	LpA 47.7 dB	
3.4 kW Models Acoustic Noise Emi	ssion	
At max fan speed	LpA 58.3 dB at Operator Position LpA 56.8 dB at Bystander Position	
At idle	LpA 50.4 dB	

AC input

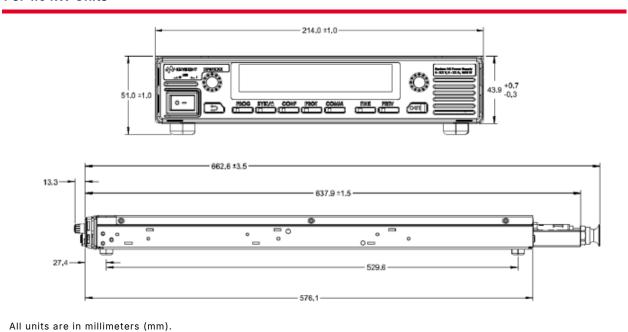
AC Input

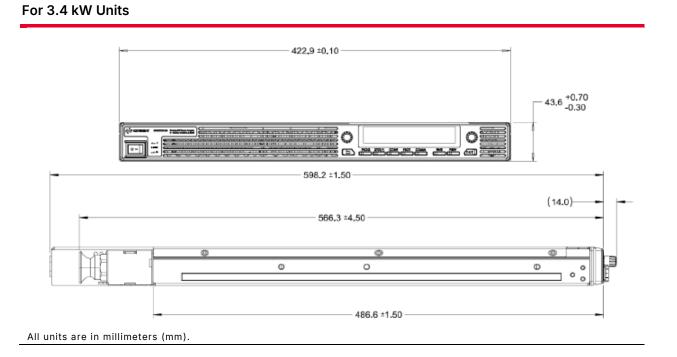
1.5 kW Models – DP57xxA				
Connections	L1, L2, PE (1-phase with protective earth)			
Voltage	100 VAC -15% to 240 VAC +10%			
Frequency	50/60 Hz			
3.4 kW Models - DP57xxAS				
Connections	L1, L2, PE (1-phase with protective earth)			
Voltage	200 VAC -15% to 240 VAC +10%			
Frequency	50/60 Hz			
3.4 kW Models - DP57xxAL				
Connections	L1, L2, L3, PE (3-phase with protective earth; no neutral)			
Voltage	200 VAC -15% to 240 VAC +10%, line-to-line			
Frequency	50/60 Hz			
3.4 kW Models – DP57xxAH				
Connections	L1, L2, L3, PE (3-phase with protective earth; no neutral)			
Voltage	380 VAC -10% to 480 VAC +10%, line-to-line			
Frequency	50/60 Hz			



Dimension Diagram

For 1.5 kW Units





Output Terminal Isolation

When power supplies are connected in series, and the load or one of the output terminals is grounded, or the load and the output terminals are floating, no point may be at a greater potential according to the following:

- For 10 ~ 100 VDC rated output, no point may be at a greater potential of ±200 VDC from ground.
- For 150 \sim 600 VDC rated output, no point may be at a greater potential of \pm 600 VDC from ground.

Options for Single-Phase Models

Part Number Description		Description
Ор	ot 861	Unterminated power cord, USA, Canada, Japan, China, other
Ор	ot 862	Harmonized unterminated power cord, Europe

Accessories

Part Number	Size	Description
DP5701A	1U half rack	Rack-mount slide kit for 1.5 kW models
N5740A	1U full rack	Rack-mount slide kit for 3.4 kW models
DP5705A		Removable SD memory option

Keysight's IO Libraries Suite

The Keysight IO Libraries Suite ships with the DP5700 to help you quickly establish an error-free connection between your PC and instruments, regardless of the vendor. It provides robust instrument control and works with your chosen software development environment.



Keysight Services

The DP5700 Series products include three years of extended warranty and three years of KeysightCare technical support, which provides unlimited access to technical experts with committed response times. Receive personalized, proactive, and priority support. Find answers in the Knowledge Center, manage service requests, and interact with Keysight experts.

Upgrading to KeysightCare Enhanced can extend your peace of mind and eliminate budgetary surprises for up to five years, and includes a calibration service of choice with prioritized turnaround times. Trust your test results with calibrated in-tolerance instruments and accurate measurements. Available in select countries. Learn more.

For More Information

Visit www.keysight.com/find/dp5700.

