DC Power Supplies

Tektronix PWS2000 Series Datasheet

Features & Benefits

Key Performance Specifications

- Linear Regulation
- Up to 72 V Output Voltage
- 0.05% Basic Voltage Accuracy
- 0.2% Basic Current Accuracy
- 10 mV / 10 mA Programming Resolution
- Less than 3 mV_{p-p} Ripple and Noise

Available Functions and Features

- Bright Display
- 20 User-defined Setup Memories
- Direct Parameter Entry using Numeric Keypad
- Vary Voltage or Current in User-selectable Steps

3-year Warranty

Tektronix®

Generate the Voltage or Current You Need

With wide current and voltage ranges, plus 10 mA and 10 mV resolution, the PWS2000 Power Supply Series satisfies a wide variety of applications. Low-noise linear regulation and 0.05% voltage accuracy provide the clean, accurate power you need at a price you can afford.

Prevent Damaged Circuits and Lost Test Time

The numeric keypad makes it easy to specify a precise current limit before you start your test. You can also specify a maximum output voltage, which will prevent accidental voltage settings above the specified maximum. A user-definable password allows you to lock the front panel to prevent unwanted adjustments during critical tests.

Designed to Make Your Work Easier

The PWS2000 Power Supply Series is designed with the ease-of-use and familiar operation you expect from Tektronix.

Intuitive Operation

The direct-entry numeric keypad makes it easy to enter precise voltage and current values. Up/Down controls, with variable step-size, allow you vary output parameters in an increment size you choose.

Bright Display

A bright vacuum fluorescent display with large digits provides excellent readability at a distance, at an angle, or under dim lighting conditions.

Setup Memories

You can save your instrument settings in one of the 20 internal memory locations by simply pressing the Save button. Each time you want to recall that setting, just push the Recall button and choose the desired preset.

Performance You Can Count On

In addition to industry-leading service and support, the PWS2000 Power Supply Series comes backed with a three-year standard warranty.

Characteristics

Electrical

Specifications	PWS2185	PWS2323	PWS2326	PWS2721
DC Output Rating				
Voltage	0 to 18 V	0 to 32 V	0 to 32 V	0 to 72 V
Current	0 to 5 A	0 to 3 A	0 to 6 A	0 to 1.5 A
Load Regulation				
Voltage	≤0.02% + 5 mV	≤0.02% + 5 mV	≤0.04% + 6 mV	≤0.02% + 4 mV
Current	≤0.1 % + 2 mA typical			
Line Regulation				
Voltage	≤0.1 % + 5 mV			
Current	≤0.1 % + 2 mA typical			
Ripple and Noise (20 Hz to 7 MHz)				
Voltage	≤1 mV_{RMS} / 3 mV_{p-p}			
Current	≤5 mA_{RMS}			
Setting Resolution				
Voltage	10 mV			
Current	10 mA			
Setting Accuracy, (25 °C ± 5 °C)				
Voltage	≤0.05% + 10 mV			
Current	≤0.2 % + 10 mA			
Readback Resolution				
Voltage	10 mV	<20 V: 10 mV ≥20 V: 100 mV		
Current	10 mA			
Readback Accuracy, (25 °C ± 5 °C)				
Voltage	≤0.05% + 15 mV	<20 V: ≤0.05% + 15 mV ≥20 V: ≤0.05% + 120 mV		
Current	≤0.1 % + 15 mA			

Display

Vacuum fluorescent display.

Memory

20 setup memories.

Power Source

Characteristic	Description
110 V AC Setting	99 V_{RMS} to 132 V_{RMS}
220 V AC Setting	198 V_{RMS} to 264 V_{RMS}
Frequency	47 Hz to 63 Hz
Power Consumption	
PWS2185/2323/2721	350 VA
PWS2326	700 VA

Physical Characteristics

Dimension	mm	in.
With Boots and Handle		
Height	105	4.15
Width	242	9.52
Depth	384	15.12
Without Boots and Handle		
Height	91	3.57
Width	217	8.55
Depth	362	14.24
Weight	**kg**	**lb.**
PWS2185	5.6	12.3
PWS2323/2326/2721	6.7	14.8

Environmental and Safety

Characteristic	Description
Temperature	
Operating	0 °C to 40 °C
Storage	–20 °C to 70 °C
Warm up	20 minutes to full uncertainty specifications
Relative Humidity (Noncondensing)	
Operating and storage	5% to 95% relative humidity (% RH) at up to 40 °C, noncondensing
Storage	5% to 95% RH at up to 40 °C, noncondensing 5% to 60% RH above 40 °C to 70 °C, noncondensing
Altitude	
Operating	2,000 meters
Storage	4,000 meters
Floating Voltage Rating	Up to 100 V (DC + peak AC) between earth ground and any output terminal
Electromagnetic Compatibility	European Union: EN 55011, Class A; IEC 61000-3-2; IEC 61000-3-3, IEC 61000-4-2, IEC 61000-4-3, IEC 61000-4-4, IEC 61000-4-5, IEC 61000-4-6, IEC 61000-4-8, IEC 61000-4-11 USA: FCC, CFR Title 47, Part 15, Subpart B, Class A Australia: EMC Framework, demonstrated per Emission Standard AS/NZS 2064 (Industrial, Scientific, and Medical Equipment)
Safety	European Union: Low Voltage directive 2006/95/EC; EN61010-1 2001 USA: Nationally recognized testing laboratory listing UL61010-1-2004 Canada: CAN/CSA C22.2 No. 61010-1 2004

Warranty

Three years.

Ordering Information

Models

Model	Description
PWS2185	DC Power Supply, 18 V, 5 A
PWS2323	DC Power Supply, 32 V, 3 A
PWS2326	DC Power Supply, 32 V, 6 A
PWS2721	DC Power Supply, 72 V, 1.5 A

PWS2000 Includes: Power supply, line cord, user manual, Traceable Certificate of Calibration, and documentation CD (includes user manuals and technical reference).

Note: Please specify power plug and preferred language option when ordering.

Optional Accessories

Accessory	Description
RMU2U*[1]	Rackmount Shelf Kit for 1 or 2 Units
386-7598-00	Rackmount Cosmetic Filler Panel

*[1] PWS2000 Series power supplies require 3U of height in a rack. The instrument's height, without boots, is 3 mm greater than 2U and 42 mm less than 3U. Filler panel 386-7598-00 may be used to fill the 42 mm gap above power supplies.

Power Plug Options

Option	Description
A0	North America
A1	Universal Euro
A2	United Kingdom
A3	Australia
A5	Switzerland
A10	China
A11	India
A12	Brazil

Language Options

Option	Description
L0	English
L1	French
L2	Italian
L3	German
L4	Spanish
L6	Portuguese
L7	Simplified Chinese
L8	Traditional Chinese
L9	Korean
L10	Russian

Service Options

Option	Description
C3	Calibration Service 3 Years
C5	Calibration Service 5 Years
CA1	Provides a single calibration event, or coverage for the designated calibration interval, whichever comes first
D1	Calibration Data Report
D3	Calibration Data Report 3 Years (with Option C3)
D5	Calibration Data Report 5 Years (with Option C5)
R5	Repair Service 5 Years
SILV100	Standard Warranty Extended to 5 Years

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