

CPS250
PS280
PS281

PS282
PS283

Power Supplies

Versatile bench or portable power supplies for most basic test and lab bench requirements.

CPS250

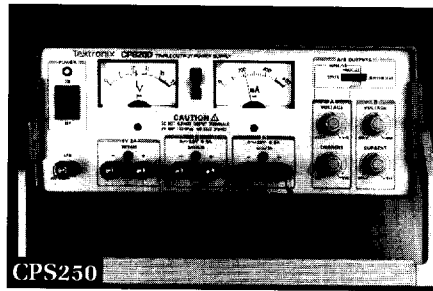
- Triple Output Power Supply
- Two Variable 0 to 20 V, 0.5 A Supplies
- Fixed 5 V, 2 A Supply
- Variable Current Limiting
- Overload Indicators

PS 280/283

- One Fixed 5 V, 3 A Supply
- Two Variable Outputs, 0 to 30 V, 2 A (PS280), 1 A (PS283)
- Variable Current Limiting
- Selectable Independent Tracking Mode
- Dual Tracking, Variable 0 to 30 V, 2.0 A (PS280); 0 to 30 V, 1.0 A (PS283)

PS281/282

- 90 W, Single Output, 3-1/2 digit Display
- 0 to 30 V, 0 to 3 A (PS281)
- 0 to 18 V, 0 to 5 A (PS282)
- Variable Current Limiting
- Overload and Over-voltage Protection



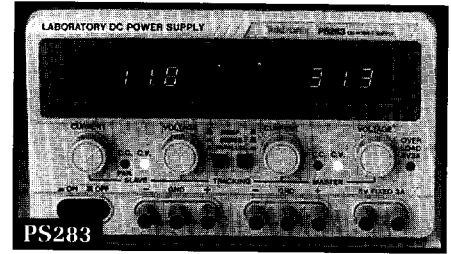
CPS250

The CPS250 Triple Output Power Supply is a versatile instrument with two variable and one fixed output. Its attractive, compact design with tilt-bail handle takes up less bench space than most other power supplies. It meets most basic test and lab bench requirements.

PS280/PS283 Power Supplies

The Tektronix PS280 and PS283 Laboratory DC Power Supplies are multifunction benchtop or portable instruments. These regulated power supplies provide fixed 5 V output for powering logic circuits and two variable outputs for a wide variety of test and experimental uses.

The PS280 and PS283 contain two identical, independently adjustable DC power supplies that can vary from 0 to 30 V, and 0 to 2 A in the PS280 or 0 to 1 A in the PS283. Front-panel switches select one of three modes of operation: independent, series, or parallel.



PS281/282 DC Power Supplies

The Tektronix PS281/282 DC Power Supplies meet the requirements of laboratory, classroom and production environments. Output is continuously variable up to the rated voltage/current by means of coarse and fine potentiometers. The PS281 is rated at 30 V/3 A; the PS282 at 18 V/5 A max.

The PS281 and PS282 are designed to be connected in series to increase voltage output or in parallel for a higher current output. Serial and parallel tracking can be achieved by connecting a rear panel jumper between two or more units.

The compact case and multiple operating modes of the PS281 and PS282 offer convenience and flexibility for a space-limited engineering bench.

APPLICATIONS

- Training
- Manufacturing Production Test
- Field Repair
- Bench Calibration and Repair
- Product Design

KEY SPECIFICATIONS

	PS281	PS282
Output Voltage	0 to 30 V DC	0 to 18 V DC
Output Current	0 to 3.0 A	0 to 5.0 A
Line Regulation	≤0.01% + 3 mV	≤0.01% + 3 mV
Load Regulation	≤0.01% + 3 mV	≤0.01% + 3 mV (≤3 A) ≤0.01% + 5 mV (>3 A)
Ripple / Noise	≤0.5 mV RMS, 5 Hz to 1 MHz	≤0.5 mV RMS, 5 Hz to 1 MHz (≤3 A) ≤1.0 mV RMS, 5 Hz to 1 MHz (>3 A)
Tracking Error	<±500 mV	<± 500 mV
Displays		
Readout	One 3-1/2 digit LED	One 3-1/2 digit LED
Accuracy	±(0.5% of reading + 2 digits)	±(0.5% of reading + 2 digits)
Overload Indicator	Yes	Yes
Insulation		
Chassis to Terminal	≥20 MΩ at 500 V DC	≥20 MΩ at 500 V DC
Chassis to Power Cord	≥30 MΩ at 500 V DC	≥30 MΩ at 500 V DC
Safety Certification	ETL, T-MARK, CSA	ETL, T-MARK, CSA

Product(s) available through an Authorized Tektronix Distributor. See pages 590-595.



Tektronix Measurement products are manufactured in ISO registered facilities.

Power Supplies

CPS250

PS282

PS280

PS283

PS281

POWER SUPPLIES

KEY SPECIFICATIONS

	CPS250	PS280	PS283
Output Voltage			
Two Variable	0 to 20 V DC	0 to 30 V DC	0 to 30 V DC
One Fixed	5.0 V	5.0 V	5.0 V
Output Current			
Two Variable	0 to 0.5 A (CC)*1	0 to 2.0 A (CC)*1	0 to 1.0 A (CC)*1
One Fixed (foldback limited)	2.0 A max	3.0 A max	3.0 A max
Line Regulation			
Two Variable	0.01% + 3 mV (CV); 0.2% + 3 mA (CC)	0.01% + 3 mV (CV); 0.2% + 3 mA (CC)	0.01% + 5 mV (CV); 0.2% + 3 mA (CC)
One Fixed	≤10 mV (CV)	≤5 mV (CV)	≤5 mV (CV)
Load Regulation			
Two Variable	0.01% + 3 mV (CV); 0.2% + 6 mA (CC)	≤0.01% + 5 mV, current > 3 A (CV); ≤300 mV, 0 to 60 V single series tracking supply (CV); 0.2% + 3 mA (CC)	≤0.01% + 3 mV (CV) ≤300 mV, 0 to 60 V single series tracking supply (CV); 0.2% + 3 mA (CC)
One Fixed	0.1% + 5 mV (CV)	≤10 mV (CV)	≤10 mV (CV)
Ripple/Noise			
Two Variable	2 mV RMS, 5 Hz to 1 MHz (CV); 3 mA RMS, 5 Hz to 1 MHz (CC)	≤1 mV RMS, 5 Hz to 1 MHz (CV); ≤3 mA (CC)	≤1 mV RMS, 5 Hz to 1 MHz (CV); ≤3 mA (CC)
One Fixed	2 mV RMS	≤2 mV RMS	≤2 mV RMS
Output in Independent Mode	Two variable 0 to 20 V (CV); 0.5 A (CC)	Two variable 0 to 30 V (CV); 2.0 A (CC)	Two variable 0 to 30 V (CV); 1.0 A (CC)
Output in Parallel Mode	One 0 to 20 V, 1.0 A max	One 0 to 30 V, 4.0 A max	One 0 to 30 V, 2.0 A max
Tracking Error	±0.2% ±20 mV	≤0.5% + 10 mV	≤0.5% + 10 mV
Series Mode	One 0–40 V, 0.5 A max or one ±20 V, 0.5 A	One 0 ±30 V, 2.0 A max or one 60 V, 2 A	One 0 ±30 V, 1.0 A max or one 60 V, 1 A
Tracking Error	±0.2% ±20 mV	±0.5% + 10 mV	±0.5% + 10 mV
Displays	Two analog meters (switchable)	Two 3-1/2 digit LED (switchable)	Two 3-1/2 digit LED (switchable)
Voltage Indicator	0 to 25 V DC ± 2.5% of full scale	0 to 30 V DC ± (0.5% of rdg + 2 digits)	0 to 30 V DC ± (0.5% of rdg + 2 digits)
Current Indicator	0 to 800 mA ± 2.5% of full scale	0 to 2 A DC ± (0.5% of rdg + 2 digits)	0 to 2 A DC ± (0.5% of rdg + 2 digits)
Overload Indicator	Yes	Yes	Yes
Insulation			
Chassis to Terminal	>50 MΩ at 500 V DC	≥20 MΩ at 500 V DC	≥20 MΩ at 500 V DC
Chassis to Power Cord	>50 MΩ at 500 V DC	≥30 MΩ at 500 V DC	≥30 MΩ at 500 V DC
Safety Certification	UL, CSA, T-MARK	ETL, CSA, T-MARK	ETL, CSA, T-MARK

(CC): When operated in Constant Current mode.
(CV): When operated in Constant Voltage mode.

ORDERING INFORMATION

CPS250

Triple Output Power Supply

Includes: Operator's Manual, three pairs of test leads, US Power Cord, One Year Warranty.

PS280

Triple Output 0 to 30 V/2 A Power Supply

Includes: Operator's Manual, 3 pairs of test leads, US power cord, one year warranty.

PS281

Single Output 30 V/3 A Power Supply

Includes: Instruction Manual, One pair of Test Leads, US Power Cord, One Year Warranty.

PS282

Single Output 18 V/5 A Power Supply

Includes: Operator's Manual, Three Pairs of Test Leads, US Power Cord, One Year Warranty.

PS283

Triple Output 0 to 30 V/1 A Power Supply

Includes: Operator's Manual, Three Pairs of Test Leads, US Power Cord, One Year Warranty.

SERVICE ASSURANCE OPTIONS

These products covered by the following service assurance options:

REP4100 – Provides One Year of Post-Warranty Repair Protection

CAL4100 – Provides One Year of Calibration Services

Product(s) available through an Authorized Tektronix Distributor. See pages 590-595.



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