

HPD 300 W

Xantrex HPD 300 W Programmable DC Power Supply



300 Watts with Near Linear Performance

The Xantrex HPD Series provides 300 watts of reliable DC power in a quarter-rack wide chassis. The supplies are ideal for benchtop, ATE systems and OEM applications, where wide adjustment of output voltage or current is required in a compact package.

The HPD series uses switch-mode technology combined with linear post regulation to provide performance comparable to an all-linear design. The supplies have excellent line and load regulation with low noise and good transient response as a result of zero voltage 'soft switching' and Power Factor Correction (PFC). The series is available in singles and duals in a single package for benchtop use. Multiple units can be rack mounted in one to four unit configurations for up to four independent 300-watt outputs for systems applications.

Product Features

- ▶ Low noise and ripple
- ▶ Excellent line/load regulation
- ▶ Constant voltage or constant current operation with automatic crossover and mode indication
- ▶ Current limit
- ▶ Front and rear outputs
- ▶ Remote sense
- ▶ LabVIEW® and LabWindows® drivers

Protection Features

- ▶ Over voltage protection
- ▶ Over temperature protection

Options

- ▶ Analog programming interface card
- ▶ RS-232 interface Card
- ▶ GPIB interface card
- ▶ GPIB-multichannel

Xantrex Technology Inc.

Headquarters
 8999 Nelson Way
 Burnaby, British Columbia
 Canada V5A 4B5
 800 670 0707 Toll Free
 604 420 1591 Fax

5916 195th Street NE
 Arlington, Washington
 USA 98223
 800 446 6180 Toll Free
 360 925 5144 Fax

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Electrical Specifications ¹

Models	15-20	30-10	60-5
Output ratings			
Output Voltage	0-15 V	0-30 V	0-60 V
Output Current	0-20 A	0-10 A	0-5 A
Output Power	300 W	300 W	300 W
Line regulation ²			
Voltage (0.01% of Vmax + 2 mV)	3.5 mV	5 mV	8 mV
Current (0.01% of Imax + 1 mA)	3 mA	2 mA	1.5 mA
Load regulation ³			
Voltage (1% of Vmax + 2 count)	3.5 mV	5 mV	8 mV
Current (1% of Imax + 1 count)	3 mA	2 mA	1.5 mA
Meter accuracy			
Voltage (1% of Vmax + 1 count)	0.25 V	0.4 V	0.7 V
Current (1% of Imax + 1 count)	0.3 A	0.2 A	0.06 A
Output noise and ripple			
rms	5 mV	5 mV	7.5 mV
p-p (0-20 MHz)	100 mV	100 mV	100 mV
Drift (8 hours) ⁴			
Voltage (0.02% of Vmax)	3 mV	6 mV	12 mV
Current (0.03% of Imax)	6 mA	3 mA	1.5 mA
Temperature coefficient ⁵			
Voltage (0.0015% of Vmax/°C)	2.25 mV	4.5 mV	9 mV
Current (0.02% of Imax/°C)	4 mA	2 mA	1 mA

1 Specifications indicate typical performance at 25° C ± 5° C, nominal line input of 120 VAC.

2 For input voltage variation over the AC input voltage range, with constant rated load.

3 For 0-100% load variation, with constant nominal line voltage.

4 Maximum drift over 8 hours with constant line, load, and temperature, after 60-minute warm-up.

5 Change in output per ° C change in ambient temperature, with constant line and load.

General Specifications

Operational AC input voltage	Single unit: 104-127 VAC at 6 Arms; Dual Unit: 104-127 VAC at 12 Arms, 47-63 Hz
Switching frequency	Nominal 100 kHz
Remote analog programming	Voltage and current programming inputs (source must be floating): 0-10 V voltage sources. Input impedance (V and I): 20 k
Remote programming	0-10 VDC for 0-100% or rated voltage or current ±1.0%
Dimensions (HxWxD)	5.2 x 4.2 x 11.7" (134.7 x 109.2 x 297.3 mm)
Weight	7.7 lb (3.5 kg)
Warranty	Five years
Regulatory approvals	CE, CSA, UL

Note: Specifications are subject to change without notice.