

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	2 mV	2 mV	2 mV
Current	3 mA	2 mA	1.5 mA
Load Regulation ³			
Voltage	2 mV	2 mV	2 mV
Current	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 (0-20 MHz)			
Voltage (p-p)	75 mV	75 mV	100 mV
Output Ripple (rms)			
Voltage	5 mV	5 mV	5 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 (0.015% 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	100 kHz (nominal)
Remote Analog Programming Option	0-10 VDC for 0-100% of rated voltage or current ± 1.0%, 0-10kΩ for 100% of rated voltage or current ± 1.0%
Remote Monitoring	0-10 VDC for 0-100% of rated voltage or current ± 1.0%
Dimensions (HxWxD)	5.2 x 4.2 x 11.7" (132 x 109.2 x 297 mm)
Weight	Approximately 7.7 lb (3.5 kg)
Warranty	5 years
Approvals	CE-marked units meet: EN61010-1, EN61000-6-2 and EN61000-6-4; CSA C/US certified to UL61010-1B and CSA C22.2 No 1010.1; Meets USA EMC standard: FCC, part 15B, class A; Meets Canadian EMC standard: ICES-001, Class A.

Note: Specifications are subject to change without notice.