

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

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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.