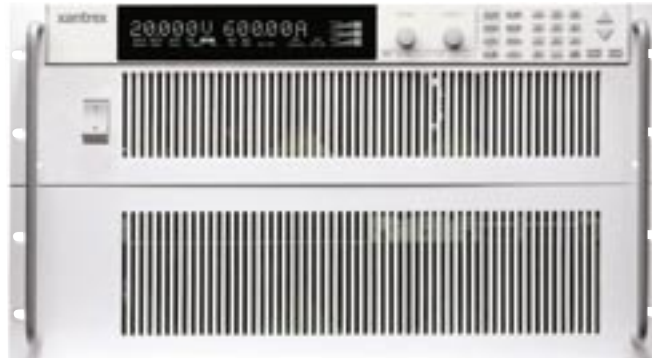


## 12 kW Digital Controlled Programmable DC Power Supply



### Provides 12 kW of DC Power for Test and Measurement Applications

The Xantrex XDC 12 kW digital controlled programmable DC power supply provides clean, reliable power for ATE, burn-in, magnet charging, OEM, and other test and measurement applications. With an embedded controller, it has a unique menu-driven auto sequencing capability, which allows for complex test sequences to be entered and saved via the front panel without the need for external computers or software.

With the high power XDC 12 kW, ten different test programs of up to 99 voltage level steps each, can be constructed and executed by a manual or external trigger. This stand-alone capability can be used for constructing simple voltage ramps, battery charging and simulation of battery voltage at engine start-up, component testing, and MIL 704E testing. Additionally, ten configurations of differing protection and output set points can also be conveniently stored, recalled, or set for default at start up.

The XDC 12 kW comes in a 10.5-inch (6U) high rack package and is available in ten models.

### Product Features

- ▶ Embedded controller
- ▶ Zero voltage "Soft Switching"
- ▶ Power Factor Correction (PFC)
- ▶ Simultaneous display of output voltage and current
- ▶ Constant power mode
- ▶ Remote sense with 5 V line loss compensation
- ▶ RS-232 interface
- ▶ LabVIEW® and LabWindows® drivers

### Protection Features

- ▶ Over and under voltage protection
- ▶ Over and under current protection
- ▶ Over and under power protection
- ▶ Over temperature protection
- ▶ Sense protection

### Options

- ▶ GPIB (IEEE 488.2 with SCPI)
- ▶ CANbus communications link for multiple unit current sharing and addressing
- ▶ High voltage input: 3-phase, 342-500 VAC

### Xantrex Technology Inc.

Headquarters  
8999 Nelson Way  
Burnaby, British Columbia  
Canada V5A 4B5  
604 422 8595 Phone  
604 421 3056 Fax

5916 195th Northeast  
Arlington, Washington  
USA 98223  
360 671 2966 Phone  
360 671 3095 Fax

800 667 8422 Sales & Support  
prg.info@xantrex.com

## 12 kW Digital Controlled Programmable DC Power Supply

Electrical Specifications										
Models	10-1200	20-600	30-400	40-300	60-200	80-150	100-120	150-80	300-40	600-20
<b>Output ratings:</b>										
Output Voltage <sup>1</sup>	0-10 V	0-20 V	0-30 V	0-40 V	0-60 V	0-80 V	0-100 V	0-150 V	0-300 V	0-600 V
Output Current <sup>2</sup>	0-1200 A	0-600 A	0-400 A	0-300 A	0-200 A	0-150 A	0-120 A	0-80 A	0-40 A	0-20 A
Output Power	12000 W	12000 W	12000 W	12000 W	12000 W	12000 W	12000 W	12000 W	12000 W	12000 W
<b>Line regulation:</b> <sup>3</sup>										
Voltage (0.01% of Vmax)	1 mV	2 mV	3 mV	4 mV	6 mV	8 mV	10 mV	15 mV	30 mV	60 mV
Current (0.1% of Imax)	1200 mA	600 mA	400 mA	300 mA	200 mA	150 mA	120 mA	80 mA	40 mA	20 mA
<b>Load regulation:</b> <sup>4</sup>										
Voltage (0.05% of Vmax +5 mV)	10 mV	15 mV	20 mV	25 mV	35 mV	45 mV	55 mV	80 mV	155 mV	305 mV
Current (0.2% of Imax +40 mA)	2440 mA	1240 mA	840 mA	640 mA	440 mA	340 mA	280 mA	120 mA	100 mA	60 mA
<b>Meter accuracy:</b>										
Voltage (0.15% of Vmax)	15 mV	30 mV	45 mV	60 mV	90 mV	120 mV	150 mV	225 mV	450 mV	900 mV
Current (0.5% of Imax)	6 A	3 A	2 A	1.5 A	1 A	750 mA	600 mA	400 mA	200 mA	100 mA
<b>Output noise (0-20 MHz):</b>										
Voltage (p-p)	75 mV	75 mV	75 mV	75 mV	100 mV	100 mV	100 mV	150 mV	250 mV	350 mV
<b>Output ripple (rms):</b>										
Voltage	10 mV	10 mV	12 mV	15 mV	15 mV	15 mV	20 mV	20 mV	30 mV	80 mV
Current <sup>5</sup>	6200 mA	3200 mA	2000 mA	1500 mA	900 mA	640 mA	460 mA	240 mA	100 mA	50 mA
<b>Drift (30 minutes):</b> <sup>6</sup>										
Voltage (0.04% of Vmax)	4 mV	8 mV	12 mV	16 mV	24 mV	32 mV	40 mV	60 mV	12 mV	240 mV
Current (0.6% of Imax)	7200 mA	3600 mA	2400 mA	1800 mA	1200 mA	900 mA	720 mA	480 mA	240 mA	120 mA
<b>Drift (8 hours):</b> <sup>7</sup>										
Voltage (0.02% of Vmax)	2 mV	4 mV	6 mV	8 mV	12 mV	16 mV	20 mV	30 mV	60 mV	120 mV
Current (0.4% of Imax)	480 mA	240 mA	160 mA	120 mA	80 mA	60 mA	48 mA	32 mA	16 mA	8 mA
<b>Temperature coefficient:</b> <sup>8</sup>										
Voltage (0.04% of Vmax/°C)	4 mV	8 mV	12 mV	16 mV	24 mV	32 mV	40 mV	60 mV	120 mV	240 mV
Current (0.06% of Imax/°C)	720 mA	360 mA	240 mA	180 mA	120 mA	90 mA	72 mA	48 mA	24 mA	12 mA
<b>OVP adjustment range: (0% to 103% of Vmax)</b>										
	0-10.3 V	0-20.6 V	0-30.9 V	0-41.2 V	0-61.8 V	0-88 V	0-110 V	0-165 V	0-330 V	0-660 V
<b>Efficiency:</b> <sup>9</sup>										
	85%	87%	87%	87%	87%	89%	89%	90%	91%	91%

- Minimum output voltage is <0.15% of rated voltage at zero output setting.
- Minimum output current is <0.2% of rated current at zero output setting when measured with rated load resistance.
- For input voltage variation over the AC input voltage range, with constant rated load.
- For 0-100% load variation, with constant nominal line voltage.
- Current mode noise is measured from 10% to 100% of rated output voltage, full current, unit in CC mode.
- Maximum drift over 30 minutes with constant line, load, and temperature, after power on.
- Maximum drift over 8 hours with constant line, load, and temperature, after 30 minute warm-up.
- Change in output per °C change in ambient temperature, with constant line and load.
- Typical efficiency at nominal input voltage and full output power.

General Specifications	
<b>Operational AC input voltage</b>	3-phase 190-242 VAC (optional 3-phase 342 - 500 VAC) 3 wire and safety ground, 47-63 Hz
<b>Input Power Factor Correction</b>	0.95 (standard version), 0.9 (HV version)
<b>Remote analog programming</b>	Voltage and current programming inputs; 0-5 V, 0-10 V (±1%) voltage sources (10 V default)
<b>Remote analog monitoring</b>	Voltage and current monitor outputs 0-5 V, 0-10 V (default) ranges for 0-100% of output (±1%)
<b>Dimensions (HxWxD)</b>	10.37 x 19.0 x 22.23" (263.4 x 482.6 x 564.6 mm)
<b>Weight</b>	170 lb (77 kg)
<b>Warranty</b>	Five years
<b>Regulatory approvals</b>	CE, UL, CSA, and FCC compliant

Note: Specifications are subject to change without notice.