

XKW 3 kW

3 kW Programmable DC Power Supply in a Low Profile Chassis



Provides 3 kW of DC Power for Test and Measurement Applications

The Xantrex XKW 3 kW programmable DC power supply provides 3 kW of clean, reliable power for OEM applications where high power and a wide adjustment of output voltage or current are required in a compact configuration. The supplies are ideal for research, product development, production test, ATE, electroplating, burn-in, and other bulk power applications.

The XKW 3 kW uses high frequency conventional PWM switching to achieve high power density in a compact 19-inch rack package. The supplies are 3.5 inches (2U) high and are available now in ten models.

Product Features

- ▶ Constant voltage with automatic crossover and mode indication
- ▶ Parallel or series connection
- ▶ External shutdown, external indicator signals
- ▶ Remote/local modes
- ▶ Remote sense, 1 V line loss compensation
- ▶ Analog programming
- ▶ LabVIEW® driver

Protection Features

- ▶ Over voltage protection
- ▶ Current limit
- ▶ Over temperature protection

Options

- ▶ GPIB interface card
- ▶ Isolated interface card (ISOL)
- ▶ Locking knobs for front panel controls

Note: The XKW Series is not available for purchase in the US.

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

3 kW Programmable DC Power Supply in a Low Profile Chassis

Electrical Specifications ¹

Models	XKW 8-350	XKW 10-300	XKW 12-250	XKW 20-150	XKW 40-75	XKW 55-55	XKW 60-50	XKW 80-37	XKW 150-20	XKW 300-10
Output ratings:										
Output Voltage	0-8 V	0-10 V	0-12 V	0-20 V	0-40 V	0-55 V	0-60 V	0-80 V	0-150 V	0-300 V
Output Current	0-350 A	0-300 A	0-250 A	0-150 A	0-75 A	0-55 A	0-50 A	0-37 A	0-20 A	0-10 A
Output Power	2800 W	3000 W	3000 W	3000 W	3000 W	3025 W	3000 W	2960 W	3000 W	3000 W
Line regulation: ²										
Voltage	2 mV	2 mV	2 mV	2 mV	2 mV	2 mV	2 mV	2 mV	7.5 mV	15 mV
Current	15 mA	15 mA	15 mA	15 mA	5 mA	2 mA	2 mA	2 mA	2 mA	2 mA
Load regulation: ³										
Voltage	5 mV	5 mV	5 mV	5 mV	5 mV	5 mV	5 mV	5 mV	5 mV	15 mV
Current	15 mA	15 mA	15 mA	15 mA	5 mA	5 mA	5 mA	5 mA	5 mA	5 mA
Meter accuracy:										
Voltage (0.5% of Vmax + 1 count)	0.05 V	0.06 V	0.07 V	0.2 V	0.3 V	0.4 V	0.4 V	0.5V	0.9 V	3 V
Current (0.5% of Imax + 1 count)	3 A	3 A	2 A	0.9 A	0.5 A	0.4 A	0.4 A	0.3 A	0.2 A	0.06 A
Output noise and ripple (rms):										
Voltage rms	10 mV	12 mV	12 mV	12 mV	15 mV	15 mV	15 mV	15 mV	20 mV	20 mV
Voltage p-p (20 Hz - 20 Mhz)	90 mV	90 mV	90 mV	90 mV	100 mV	100 mV	100 mV	150 mV	150 mV	200 mV
Analog Prog. Accuracy:										
Voltage (1% of Vmax)	80mV	100 mV	120 mV	200 mV	400 mV	550 mV	600 mV	800 mV	1.5 V	3 V
Current (1% of Imax)	3500 mA	3000 mA	2500 mA	1500 mA	750 mA	550 mA	500 mA	370 mA	200 mA	100 mA
Drift (8 hours): ⁴										
Voltage (0.05% of Vmax)	4 mV	5 mV	6 mV	10 mV	20 mV	27.5 mV	30 mV	40 mV	75 mV	150 mV
Current (0.05% of Imax)	175 mA	150 mA	150 mA	75 mA	37.5 mA	27.5 mA	25 mA	18.5 mA	10 mA	5 mA
Temperature coefficient: ⁵										
Voltage (0.02% of Vmax/°C)	1.6 mV	2 mV	2.4 mV	4 mV	8 mV	11 mV	12 mV	16 mV	30 mV	60 mV
Current (0.03% of Imax/°C)	105 mA	90 mA	75 mA	45 mA	22.5 mA	16.5 mA	15 mA	11.1 mA	6 mA	3 mA
OVP Adjustment Range: (5% to 110% of Vmax)										
	0.4-8.8 V	0.5-11 V	0.6-13.2 V	1-22 V	2-44 V	2.75-60.5 V	3-66 V	4-88 V	7.5-165 V	15-330 V

- Specifications indicate typical performance at 25° C ± 5° C.
- For input voltage variation over the AC input voltage range, with constant rated load.
- For 0-100% load variation, with constant nominal line voltage.
- Maximum drift over 8 hours with constant line, load, and temperature, after 90-minute warm-up.
- Change in output per ° C change in ambient temperature, with constant line and load.

General Specifications

Operational AC input voltage	200-250 VAC at 26 A rms 1f, or 190-250 VAC at 16 A rms 3-phase, 47-63 Hz 3-phase
Remote analog programming	Voltage and current programming inputs: 0-5 k, 0-10 k resistances; 0-5 V, 0-10 V voltage sources (5 V default)
Remote analog monitoring	Voltage and current monitor outputs 0-5 V, 0-10 V (default) ranges for 0-100% of output (± 1%)
Operating temperature range	32 to 122°F (0 to 50°C)
Storage temperature range	-67 to 185°F (-55 to 85°C)
Humidity range	0 to 80% RH, non-condensing
Dimensions (HxWxD)	3.45 x 19 x 20" (87.6 x 482.6 x 508 mm)
Weight	35 lb (16 kg)
Warranty	Five years
Regulatory approvals	CE, CSA