

XFR SERIES

Lab Power Supplies: 1200W - 2800W



Features

- Four power ranges: 1200W~2800W
- Front panel control: 10 - turn voltage and current potentiometers
- Remote interlock: TTL compatible input, selectable logic
- External program signal options
- V & A front panel meters
- OVP and overload protection
- Constant voltage or constant current output with automatic crossover
- Single phase or three phase input
- Designed to meet CSA22.2 No.234-M90, UL1950 and EN6950 safety standards and FCC Part 15, Class A EMI standards.

The new XFR series laboratory DC power supplies offer the most cost effective bench power supply from 1.2kw to 2.8kw. Front panel control and digital display, remote programming and a host of other features makes the XFR series a must to have in any R & D laboratory.

Specifications

AC INPUT VOLTAGE RANGES:	1200W: 90-130 Vac or 180-250 Vac 1 ϕ (17A max @ 120 Vac, 8.8A max @ 230 Vac typical) 190-250 Vac 1 ϕ 2800W: (22.6A @ 208 Vac, 20.5A @ 230 Vac typical).
FREQUENCY:	47 - 63Hz
SAFETY:	Designed to meet UL1950, EN6950, CSA
LOAD REGULATION:	Voltage: 0.05% of Vmax + 2mV ; Current: 0.05% of I max + 2mA
LINE REGULATION:	Voltage: 0.075% of Vmax + 5mV. Current: 0.075% of I max + 5mA
OUTPUT RIPPLE & NOISE (V):	(Model dependent) rms: 5.60mV; pp (0 - 20MHz) 50 - 600mV
STABILITY: ¹	Voltage:0.05% of V max; Current: 0.05% of I max.
TEMP. CO-EFFICIENT: ²	Voltage: 0.02% of V max/ $^{\circ}$ C; Current: 0.03% of I max/ $^{\circ}$ C
REMOTE SENSE COMP: ³	5V/ line.
OVP ADJUSTMENT RANGE:	5% to 110% of V maximum
POWER UP DELAY:	3 seconds maximum.
VOLTAGE MODE TRANSIENT RESPONSE TIME:	1ms for the output voltage to recover within 0.1% of its previous level after a step change in load current of up to 50% of rated output.
SWITCHING FREQUENCY:	Nominal 125KHz (250kHz output ripple).
TYPICAL EFFICIENCY:	85%
REMOTE MONITORING:	Voltage and current: 0 - 5V, 0 - 10V; 0 to full scale output 1% accuracy.
TRACKING (1200W MODELS):	Up to five identical units can be connected for parallel operation. Two units can be configured for series operation with a maximum output of 1000V. Power sharing within \pm 5%
RESOLUTION:	0.02% of V max
METER ACCURACY:	Voltage: 1% of V max + 1 count; Current: 1% of I max + 1 count
REMOTE PROGRAMMING:	Full Scale Input...Voltage and current programming: 0-5k, 0-10k resistances; 0-5V, 0-10 voltage sources
PROGRAM & READBACK:	V & I...0 - 5V; 4 - 20mA (optional)
DIGITAL INTERFACES:	RS232, GPIB, SAMI interfaces (optional)
OPERATING TEMP. RANGE:	0 to 50 $^{\circ}$ C. From 50 to 70 $^{\circ}$ C, derate 2% per $^{\circ}$ C
HUMIDITY RANGE:	0 - 80% RH non-condensing. Fan cooled.
COOLING:	Air exhaust to rear. Overtemp shutdown, auto. restart.



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General Features...

- Low noise
- Precisely regulated
- Constant voltage or constant current output with automatic mode crossover
- Thermal shutdown, latching or auto reset
- Output standby mode
- Over voltage protection
- Easy to configure, install, and use in all system applications
- Connect multiple units in parallel or in series for increased current or voltage
- Remote monitor signals for output V and I
- External analogue programme signals are standard
- Optional digital interfaces for complete remote programming and readback capability
- Four power ranges: 1200W, 2800W
- Models available with voltage ranges from 0-7.5 VDC to 0-600 VDC

MODEL	OUTPUT		POWER
	V	A	
XFR 7.5 - 140	0 - 7.5V	0 - 140A	1200W
XFR 20 - 60	0 - 20V	0 - 60A	1200W
XFR 40 - 30	0 - 40V	0 - 30A	1200W
XFR 60 - 20	0 - 60V	0 - 20A	1200W
XFR 100 - 12	0 - 100V	0 - 12A	1200W
XFR 150 - 8	0 - 150V	0 - 8A	1200W
XFR 300 - 4	0 - 300V	0 - 4A	1200W
XFR 600 - 2	0 - 600V	0 - 2A	1200W
XFR 7.5 - 300	0 - 7.5V	0 - 300A	2800W
XFR 20 - 130	0 - 20V	0 - 130A	2800W
XFR 40 - 70	0 - 40V	0 - 70A	2800W
XFR 60 - 46	0 - 60V	0 - 46A	2800W
XFR 100 - 28	0 - 100V	0 - 28A	2800W
XFR 150 - 18	0 - 150V	0 - 18A	2800W
XFR 300 - 9	0 - 300V	0 - 9A	2800W
XFR 600 - 4	0 - 600V	0 - 4A	2800W

Front Panel Control...

- Digital display of both V and I
- Ten-turn front panel V and I controls for high resolution setting of the output V and I
- Front panel push button control: output standby mode, remote/local programming mode selection, and preview of V, I, or OVP setpoints
- Front panel LED indicators: V and I mode operation, OVP, remote programming mode and shutdown

Analogue Control...

- Remote analogue programming of voltage and current limit with selectable programming ranges
- Isolated remote analogue programming or readback of the output V or I with the optional ISOL interface

Optional Digital Control...

- Internal GBIP programming with the GPIB interface option
- Single Address Multichannel Interface (SAMI) for managing a network of supplies at a single IEEE-488 address
- Serial instrument control with the internal RS232 interface option

Mechanical Specifications:

AC Input Connector Type: Wire clamp connector with strain relief cover

Main Output: 1200W: Nickel plated copper bus bars for 7.5V to 60V models.
Wire clamp connector for 60V and higher models.

Analogue Programming & Sense Connector: 2 piece wire clamp connector.

Dimensions & Weight: 1200W: H 44mm x W 482.6mm x D 508mm Approx: 8.2Kg
2800W: H 88.9mm x W 482.6mm x D 508mm Approx: 15Kg

Specifications subject to change without notice.

1. Maximum drift over 8 hours with constant line, load, and temperature, after 30 minute warm up.
2. Change in output per °C change in ambient temperature, with constant line and load.
3. Line drop is subtracted from total voltage available at supply output.