## 350 to 840 W Laboratory DC Power Supply



## Dual Output DC Power Supply with Powerflex

The Xantrex XPF is a new type of bench power supply designed to meet the need for flexibility in the choice of voltage and current. Typically, the maximum voltage and maximum current are not required simultaneously. The PowerFlex design enables higher currents to be generated at lower voltages within an overall power limit envelope. This is achieved by using the latest switch-mode technology.

The XPF Series are dual output DC power supplies with two completely independent and isolated outputs. If required, the outputs can be wired in series or parallel to achieve up to double the maximum voltage or double the maximum current.

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## 350 to 840 W Laboratory DC Power Supply

| Electrical Specifications |  |  |
| :---: | :---: | :---: |
| Models: | 35-10 | 42-20 |
| Output Ratings |  |  |
| Output Voltage | OV-35V | 0V-42 V |
| Output Current | 0-10A | 0-20A |
| Outputs | 2 | 2 |
| Output Power | up to 175 W per output | up to 420 W per output (See XPF 35-10 and XPF 42-20 PowerFlex power envelope graph) |
| OVP Range | 10\% -110\% of maximum output voltage |  |
| Voltage Setting | By coarse and fine controls |  |
| Current Setting | By single logarithmic control |  |
| Output Impedance | Typically $<5 \mathrm{~m} \Omega$ in constant voltage mode. Typically $>5 \mathrm{k} \Omega$ in constant current mode (voltage limit at max.) |  |
| Line Regulation | $<0.01 \%$ of max. output for a $10 \%$ line voltage change |  |
| Load Regulation | <0.05\% of max. output (XPF 35-10) and <0.01\% of max. output (XPF 42-20) for a $90 \%$ load change. |  |
| Ripple and Noise | $5 \mathrm{mV} \mathrm{rms} \mathrm{max} \mathrm{typically} 2 \mathrm{mV} \mathrm{rms},,<20 \mathrm{mV} \mathrm{pk}-\mathrm{pk}$, (20 MHz bandwidth) both outputs fully loaded (7A @ 25V), CV mode (XPF 35-10) |  |
|  | Typically $<1 \mathrm{mV} \mathrm{rms}, \mathrm{<5mV} \mathrm{pk-pk}, \mathrm{(20} \mathrm{MHz} \mathrm{bandwidth)} \mathrm{both} \mathrm{outputs} \mathrm{loaded} \mathrm{(10A} \mathrm{@} \mathrm{42V)} \mathrm{CV} \mathrm{mode} \mathrm{(XPF} \mathrm{42-20)}$ |  |
| Transient Response | $<2 \mathrm{~ms}$ to within 100 mV of set level (XPF 35-10) and <250 s to within 50 mV of set level (XPF 42-20) for 90\% load change |  |
| Temperature Coefficient | Typically $<100 \mathrm{ppm} /{ }^{\circ} \mathrm{C}$ |  |
| Output Protection | Forward protection by OVP trip; maximum voltage that should be applied to the terminals is 50 V . Reverse protection by diode clamp for |  |
|  | reverse currents up to 3 A |  |
| Status Indication | LED indication of Output On, CV, Cl and Power Limit. Message on display for over-voltage trip |  |
| Output Switch | Push-push switch operating electronic power control. Preset voltage and curent are displayed when the output is off |  |
| Output Terminals | 4 mm terminals on 19mm (0.75") pitch. 15 A max. rating (XPF 35-10) and 30 A max. rating (XPF 42-20) |  |
| Sensing | Remote sensing via a front panel terminal block or local sensing (at output terminals). Selection by slide switch |  |
| Meter Resolution | $10 \mathrm{mV}, 10 \mathrm{~mA}$ |  |
| Meter Accuracy: |  |  |
| Voltage | $0.2 \% \pm 1$ digit |  |
| Current | $0.5 \% \pm 1$ digit |  |

## Power Envelope (each output)

The maximum current at any voltage setting is limited by the power envelope which is set to give 5 A at 35 V rising to 10 A at 12 V under all AC supply conditions (both output loaded). At lower voltages the power is restricted by the 10 amps current maximum.



## General Specifications

| AC Input |
| :--- |
| Cooling |
| Power Consumption |
| Operating Tempature Range |
| Storage Range |
| Environmental |
| Safety |
| EMC |
| Dimensions (HxWxD) |
| Weight |
| Warranty |
| Approvals |

$110 \mathrm{~V}-120 \mathrm{~V}$ AC or $220 \mathrm{~V}-240 \mathrm{~V} \mathrm{AC} \pm 10 \%$ (adjustable internally, option HV for factory set $220-240 \mathrm{VAC}$ input) $50 / 60 \mathrm{~Hz}$. Installation Category II.
Convection (XPF 35-10), Fan (XPF 42-20)
600 VA max. (XPF 35-10), 1100 VA max. (XPF 42-20)
$5^{\circ} \mathrm{C}$ to $40^{\circ} \mathrm{C}, 20 \%$ to $80 \% \mathrm{RH}$
$-40^{\circ} \mathrm{C}$ to $+70^{\circ} \mathrm{C}$
Indoor use at altitudes up to 2000m, Pollution Degree 2
Complies with EN61010-1
Complies with EN61326
$5.1 \times 8.3 \times 14.8^{\prime \prime}(130 \times 210 \times 375 \mathrm{~mm})$
$11 \mathrm{lb} .(5 \mathrm{~kg})$
3 years
CE-marked units meet: EN61010-1 and EN61326

Note: Specifications are subject to change without notice.

