Sorensen XEL Series

90W Linear Benchtop Supply with V-Span

15–250 V

360 mA–6 A

| | $\sim$ | 115 | 230 |

LXI USB GPIB RS232

- Ideal for engineering lab use
- Digital features with analog controls
- Remote control for bench & system application
- S-Lock: Set and lock the voltage
- V-Span: user-defined voltage limits
- Small benchtop footprint
- Rack mounting 1/4 rack x 3U, single module
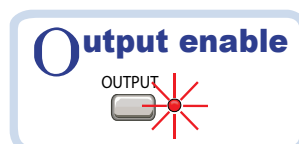- Rack mounting 1/2 rack x 3U, dual module

The Sorensen XEL benchtop power supply is as easy to use as simple analog power supplies but offers the flexibility of advanced digital features. The user interface allows easy control with single-turn knobs including a fine control knob for voltage.

This easy-to-use interface is complemented by V-Span, S-lock and Output Enable functions. V-Span allows the user to set a maximum and minimum value over which the knob control operates. This provides more precise control over the voltage as the knob operates over a narrow range as well as protecting devices under test by limiting the maximum voltage. S-Lock provides an easy method to output a regulated fixed voltage. Output Enable lets the user setup the desired voltage and current levels prior to actually turning on the output. All of these features in a laboratory bench supply are only found in the XEL series.

At 4.2x11.3 inches (108mm x 287mm), the XEL series occupies the least bench top space of any programmable power supply. The dual output model offers 90W per channel, also in a compact 8.4x11.3 inches (216mm x 287mm)

The dual output XEL30-3D is two 30V/3A power supplies in one unit. All of the features of the single output version are also in the dual output. The outputs are fully independent and isolated. Plus, the outputs can be operated in 4 modes: isolated, tracking, ratio tracking and true parallel. In addition, the outputs can be enable (on/off) independently or synchronously.

The programming "P" option includes LXI Class C Ethernet, USB, RS-232 and analog remote control. The option "GP" inlcudes GPIB programming plus all of the interface methods included in the "P" option described above.

V-Span
3.6V 5.8V
Vmin Vmax
0V 30V

S-Lock 🔒
LOCK
VOLTAGE CURRENT

Output enable
OUTPUT

AMETEK®
PROGRAMMABLE POWER

XEL Series : Product Specifications

Output Ratings						
Model	**XEL 15-5**	**XEL 30-3**	**XEL 60-1.5**	**XEL 30-3D**	**XEL 120-0.75**	**XEL 250-0.36**
Voltage (VDC)	0-15	0-30	0-60	0-30	0-120	0-250
Current (ADC)	0.1 mA - 5 A	0.1 mA - 3 A	0.1 mA - 1.5 A	0.1 mA - 3 / 6 A	0.01 mA - 750 mA	0.01 mA - 360 mA
Power (W)	75	0-90	90	90/180	90	90
Output Performance[1]						
Voltage Meter	4-digit meter					
Accuracy, Resolution	0.1% + 10mV, 10mV					
Current Meter	4-digit meter					
Accuracy, Resolution	0.5% + 3mA, 1mA	0.3% + 3mA, 1mA	0.3% + 3mA, 1mA	0.3% + 3mA*, 1mA	0.3% + 0.3mA, 0.1mA	0.3% + 0.3mA, 0.1mA
Low Current	< 500mA					
Accuracy, Resolution	0.3% + 0.3mA, 0.1mA					
Voltage Ripple (20MHz bandwidth)	0.4 mVRMS					
Voltage Noise (20MHz bandwidth)	2 mVpp					
Current Ripple	< 0.2 mARMS (< 40 μARMS on 500mA range)					
Digital Programming Performance Option						
Voltage Accuracy, Resolution	± (0.05% + 10mV), 1mV					
Current Accuracy	± (0.3% + 0.005A) to 3A, ± (0.5% + 0.005A) to 6A, ± (0.3% + 0.5mA) on 500mA range					
Curreny Resolution	0.1mA (0.01mA on 500mA range)					
Load Regulation						
Voltage	0.01% + 4.5mV with remote sense up to 0.5V line drop					
Current	0.01% + 500μA Specification applies for line resistance <0.5ohms when remote sense is used					
Line Regulation (10% line change)						
Voltage	0.01% + 2.0mV					
Current	0.01% + 250μA					
Transient Response	<50μs to within 50mV of setting (90% load change)					
[1] 120V & 250V models have a slightly modified performance specification. See data sheet or manual on web site for complete specifications						
Common						
AC Input	115 VAC ± 10%, 50/60Hz (230VAC available as option MHV) (100VAC available as option MJV)					
Power	280VA maximum					
Operating Temperature	5-40 °C, 20-80% RH					
Storage Temperature	-40 to +70 °C					
Weight	9.9 lbs. / 4.5 kgs, XEL30-3D: 18.8 lbs. / 9 kgs					
Size (WxHxD)	4.2x5.2x11.3 inches / 107x131x288 mm, XEL30-3D: 8.4x5.2x11.3 inches / 214x131x288 mm					
Options						
MHV	Configured for 230VAC input					
MJV	Configured for 100VAC input					
Programming "P"	LXI Class C Ethernet, USB, RS-232 and remote analog **					
Programming "GP"	GPIB 488.2, LXI Class C Ethernet, USB, RS-232 and remote analog **					
Accessories						
RM-XPDG2	Rack mount kit for XEL, XT and/or XPD					
Model Numbers						
XEL15-5	15 V, 5 A					
XEL30-3	30 V, 3 A					
XEL60-1.5	60 V, 1.5 A					
XEL30-3D	30 V, 3 A Dual Output. The outputs are fully independent and isolated.					

* Current accuracy in parallel mode = 0.5% + 3mA   ** Remote Analog not available on dual "D" ouput option