## BENCH XR Series 600W Programmable Power Supplies





- 600W with Extended Range
- 5 Models: Up to 400V and 33A
- Small, High-Density 1U Package
- **■** Wireless Digital Remote Sense
- Built-In Voltage and Current Measurement
- Full OCP and OVP Protection

Plus all the features of BENCH Series Power Supplies

## Standard User Interface Includes:

- **■** Ethernet, USB 2.0 and Analog
- Command Capability for Keysight 603x, Sorenson DLM and Xantrex XFR

## Optional:

■ 1U Rack-Mount Kits (Single or Dual)

- Medical Surgical Equipment
- Semiconductor Manufacturing
- Military Electronics
- Automotive Industry
- Research & Development
- Industrial Applications
- Forensic Crime Labs
- Telecommunications

The New Versatile Power BENCH XR Series are economical, programmable, DC power supplies that will give you just the right performance – at just the right price – in a small, compact package.

See model specifications and details on back.



BENCH XR Series 600W Programmable Power Supplies					
BENCH XR MODEL:	30-33 XR	50-20 XR	100-10 XR	200-5 XR	400-2.5 XR
Output <sup>1</sup>					
Voltage, Volts	30 V	50 V	100 V	200 V	400 V
Current, Amps	33 A	20 A	10 A	5 A	2.5 A
Power, Watts	600 W	600 W	600 W	600 W	600 W
Output Ripple & Noise <sup>2</sup>					
RMS Constant Voltage	5 mV	5 mV	10 mV	25 mV	50 mV
P-P Constant Voltage	20mV	25 mV	50 mV	100 mV	200 mV
Regulation					
Load: 10-90% - Voltage Load: 10-90% - Current			0.1% 0.1%		
Line: 90-132 VAC Input <sup>2</sup> - Voltage			0.1%		
Line: 90-132 VAC Input <sup>2</sup> - Current			0.1%		
Line: 180-260 VAC Input <sup>2</sup> - Voltage			0.1%		
Line: 180-260 VAC Input <sup>2</sup> - Current			0.1%		
Programming Accuracy <sup>1</sup>					
Voltage			0.1%		
Current			0.1%		
Measurement Accuracy					
Voltage			0.1%		
Current			0.1%		
<b>Transient Recovery Time</b> <sup>3</sup>					
Time	≤1 ms	≤1 ms	≤1 ms	≤1 ms	≤1 ms
Supplemental Characteristics*					
Output response time (settle to within $\pm 1\%$ of the rated output, with a resistive load)					
Up, Full Load, Seconds	0.08 s	0.08 s	0.08 s	0.08 s	0.08 s
Down, Full Load, Seconds	0.08 s	0.08 s	0.08 s	0.08 s	0.08 s
Down, No Load, Seconds	0.50 s	0.50 s	0.50 s	0.50 s	0.50 s
Command Response Time <sup>4</sup> , Milliseconds			50 ms		
Data Readback Transfer Time <sup>5</sup> , Milliseconds	d 1 V	1 V	5 ms	1 V	1 \/
Remote Sense Compensation Volts/Load Lead	u I V	1 V	1 V	1 V	1 V
Over-Voltage Protection Range, Volts	0.5-33 V	0.5-55 V	0.5-110 V	0.5-220 V	0.5-440 V
Accuracy, Volts	0.5-55 V 0.1 V	0.2 V	0.4 V	0.5-220 V 0.8 V	1.6 V
Output Ripple and Noise <sup>2</sup> , CC rms, Milliamps	7 mA	5 mA	5 mA	5 mA	10 mA
Programming Resolution Voltage			0.1%		
Measurement Resolution Current			0.1%		
Front Panel Display Accuracy					
Voltage			0.1%		
Current			0.1%		
Mechanical					
Dimensions Height 1.73 in. (44 mm) x Width 8.82 in. (224 mm) x Depth 10.30 in. (262 mm)					
Weight 5.8 lbs. (2.6 Kg)					

## Weig Notes

- 1. Minimum voltage is guaranteed to a maximum of 1% of the rated output voltage. Minimum current is guaranteed to a maximum of 1% of the rated output current.
- 2. Up to 20 MHz (see application note AN024 for measurement details).
- 3. Time for output voltage to recover within 0.5% of its rated output for a load change from 10 to 90% of its rated output current. Voltage set point from 10% to 100% of rated output.
- 4. Add this to the output reopens time to obtain the total programming time.
- 5. Time to provide data back to the controller using LAN interface (does not include A/D conversion time).
- \* Supplemental characteristics are not warranted but are descriptions of typical performance determined either by design or type testing.

  Specifications subject to change without notice. Contact Versatile Power for full specifications and additional information. 02.10.16

Highest quality power products through the use of innovative design.



