# BENCH XR Series 600W Programmable Power Supplies





- 600W with Extended Range
- **LXI Certified**
- 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**
- Series and Parallel Operation



## Standard User Interface Includes:

- **■** Ethernet, USB 2.0 and Analog
- **LXI Interface**
- 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, LXI Certified, 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 LXI Certified 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				
Output Ripple & Noise <sup>2</sup>					
RMS Constant Voltage	20 mV	100 mV	150 mV	150 mV	50 mV
P-P Constant Voltage	60 mV	100 mV	100 mV	100 mV	200 mV
Regulation					
Load: 10-90% - Voltage	15 mV	25 mV	50 mV	100 mV	200 mV
Load: 10-90% - Current	15 mA				
Line: 100-132 VAC Input <sup>2,3</sup> - Voltage	15 mV	25 mV	50 mV	100 mV	200 mV
Line: 100-132 VAC Input <sup>2,3</sup> - Current	15 mA				
Line: 180-260 VAC Input <sup>2,3</sup> - Voltage	15 mV	25 mV	50 mV	100 mV	200 mV
Line: 180-260 VAC Input <sup>2,3</sup> - Current	15 mA				
Programming Accuracy <sup>1</sup>					
Voltage 0.1%+	15 mV	25 mV	50 mV	100 mV	200 mV
Current 0.1%+	66 mA	40 mA	20 mA	10 mA	5 mA
Measurement Accuracy					
Voltage 0.1%+	15 mV	25 mV	50 mV	100 mV	200 mV
Current 0.1%+	60 mA	40 mA	15 mA	10 mA	5 mA
<b>Transient Recovery Time</b> <sup>3</sup>					
Time	≤1 ms				
Supplemental Characteristics*					
Output response time (settle to within ±1%					
Up, Full Load, Seconds	0.08 s				
Down, Full Load, Seconds Down, No Load, Seconds	0.08 s 0.50 s				
Command Response Time <sup>4</sup> , Milliseconds	0.50 5	0.50 5	50 ms	0.50 5	0.50 5
Data Readback Transfer Time <sup>5</sup> , Milliseconds			5 ms		
Remote Sense Compensation Volts/Load Lea	ad 1 V	1 V	2 V	4 V	4 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	0.3 V	0.5 V	1.0 V	2.0 V	4.0 V
Output Ripple and Noise <sup>2</sup> , CC rms, Milliamps	5 7 mA	5 mA	5 mA	5 mA	10 mA
Programming Resolution Voltage 0.05%+	10 mV	25 mV	50 mV	100 mV	200 mV
Measurement Resolution Current 0.05%+	20 mA	20 mA	10 mA	5 mA	2.5 mA
Front Panel Display Accuracy Voltage 0.1%+	10 mV	25 mV	50 mV	100 mV	200 mV
Current 0.1%+	33 mA	20 mA	10 mA	5 mA	2.5 mA
Mechanical					
Dimensions Height 1.73 in. (44 mm) x Width 8.82 in. (224 mm) x Depth 10.30 in. (262 mm)					
Weight 6 lbs. (2.7 Kg)					

#### Notes

- 1. Minimum voltage is guaranteed at greater than 1% of the rated output voltage. Minimum current is guaranteed at greater than 1% of the rated output current.
- 2. Measured with 20 MHz bandwidth and excluding line frequency ripple (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. 06.01.20

Highest quality power products through the use of innovative design.



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