

XBL SERIES 6000



- Excellent Programming Accuracy
- High Speed Programmable Slew Rate
- Ethernet Control
- Closed Box Calibration
- RBL Command Support
- Pulse Load Shaping
- Full Range Switching
- 19 inch Rack Mount

The XBL Dynaload Series features 800, 2000, 4000, and 6000 watt models with wide range voltage inputs and sophisticated computer programming via GPIB, Ethernet, or RS232. These units feature an integrated web page for local system operation and control.

Individual models are available for specialized low voltage high current applications. High voltage models up to 1000 volts are also available.

All models include easy to apply master slave parallel capabilities and closed box calibration. Higher power models incorporate variable speed forced air cooling to assure a quiet environment.

GENERAL SPECIFICATIONS (PRELIMINARY)

OPERATION

Constant Current: 0 to selected full scale current
 Prog. Accuracy: .1% of setpoint ± 5 ma
 Resolution(IEEE): .0015% of selected full scale

Constant Resistance: Constant Resistance mode operates in Amps/Volt, IEEE units entered in ohms or A/V
 Prog. Accuracy: 1% of setpoint ± 5 ma
 Resolution(IEEE): .0015% of selected full scale

Constant Voltage: 0 to selected selected full scale
 Prog. Accuracy: 1% of setpoint ± 250 mv
 Resolution(IEEE): .0015% of selected full scale

Constant Power: 0 to full scale power
 Prog. Accuracy: 1% of setpoint ± 250 mw
 Resolution(IEEE): .0015% of full scale power

ANALOG MODE

Ext. Prog: 0 to 10 Volts input yields 0 to selected full scale Input
 Impedance: 330k Ohms

PULSE MODE

Frequency: 1Hz to 5kHz
 Duty Cycle: 0 - 100%
 Minimum Pulse Width: 125usec

Adjustable Slew Rate:

Max: 0 to full scale in 10 μ S - adjustable

OUTPUT SIGNALS

Current Sample Output:

Scaling: 10 Volts = selected full scale
 Accuracy: $\pm 0.5\%$ of selected full scale

MISCELLANEOUS

AC Input: User Selectable 100VAC, 120VAC, 200VAC, 240VAC, $\pm 10\%$, 48 - 62 Hz @ 350W
Ambient Temp: 0°C to 40°C

PROTECTION

Current Limit:

Analog Models: Approximately 105% of selected full scale current
 Range(IEEE): 0-105% of selected full scale
 Resolution(IEEE): 0.4% of selected full scale

Voltage Limit:

Analog Models: Load disconnect at 105% of selected full scale voltage
 Range(IEEE): 0-105% of selected full scale
 Resolution(IEEE): 0.4% of selected full scale

Power Limit:

Range(IEEE): 0 - 6300 Watts
 Resolution(IEEE): 0.4%

Thermal: Load disconnect at internal temperature of 105°C

Undervoltage: Load inhibited at less than 1 Volt, when enabled

COMMUNICATION CHANNEL READBACK

Current:

Resolution: .0015% of Selected Full Scale
 Accuracy(Range): 0.1% ± 5 ma

Voltage:

Resolution: .0015% of Selected Full Scale
 Accuracy(Range): 0.1% ± 5 ma

Power:

Resolution: 1 Watt
 Accuracy: 0.1% ± 5 ma

Communication Modes:

IEEE 488
 RS 232
 Ethernet (HTTP, TCP, & Telnet)

XBL SERIES 6000 WATTS

XBL 100-600-6000

OPERATING RANGES (FULL SCALE range)

Voltage: 10 Volts, 50 Volts, 100 Volts
Current: 20 Amps, 200 Amps, 600 Amps
Power: 6000 Watts
Short Circuit: 0.003 Ohms max.

CONSTANT RESISTANCE RANGES

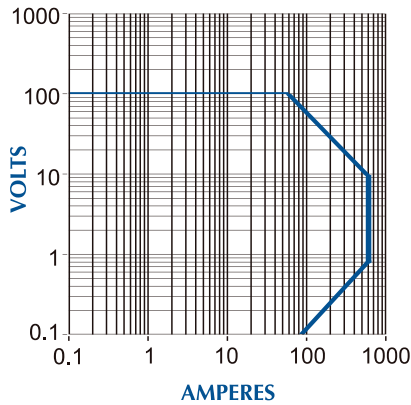
High Ohms Mode

Range	20A	200A	600A
10V	0-1 A/V	0-10 A/V	0-30 A/V
50V	0-2 A/V	0-2 A/V	0-6 A/V
100V	0-1 A/V	0-1 A/V	0-3 A/V

Low Ohms Mode

Range	20A	200A	600A
10V	0-10 A/V	0-100 A/V	0-300 A/V
50V	0-2 A/V	0-20 A/V	0-60 A/V
100V	0-1 A/V	0-10 A/V	0-30 A/V

INPUT CHARACTERISTICS:



XBL 400-600-6000

OPERATING RANGES (FULL SCALE range)

Voltage: 20 Volts, 200 Volts, 400 Volts
Current: 20 Amps, 200 Amps, 600 Amps
Power: 6000 Watts
Short Circuit: 0.010 Ohms max.

CONSTANT RESISTANCE RANGES

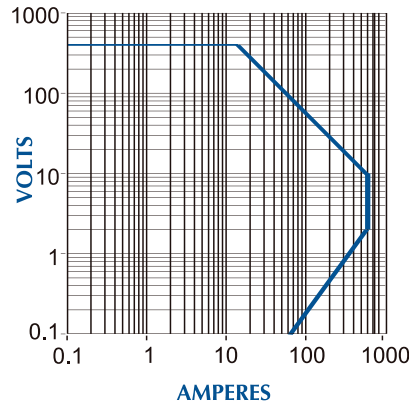
High Ohms Mode

Range	20A	200A	600A
20V	0-5 A/V	0-5 A/V	0-15 A/V
200V	0-0.05 A/V	0-5 A/V	0-1.5 A/V
400V	0-0.025 A/V	0-2.5 A/V	0-7.5 A/V

Low Ohms Mode

Range	20A	200A	600A
20V	0-5 A/V	0-50 A/V	0-150 A/V
200V	0-5 A/V	0-2.5 A/V	0-15 A/V
400V	0-2.5 A/V	0-2.5 A/V	0-7.5 A/V

INPUT CHARACTERISTICS:



XBL 600-200-6000

OPERATING RANGES (FULL SCALE range)

Voltage: 20 Volts, 200 Volts, 600 Volts
Current: 2 Amps, 20 Amps, 200 Amps
Power: 6000 Watts
Short Circuit: 0.014 Ohms max.

CONSTANT RESISTANCE RANGES

High Ohms Mode

Range	2A	20A	200A
20V	0-0.05 A/V	0-5 A/V	0-5 A/V
200V	0-0.005 A/V	0-0.05 A/V	0-5 A/V
600V	0-0.0016 A/V	0-0.016 A/V	0-1.66 A/V

Low Ohms Mode

Range	2A	20A	200A
20V	0-5 A/V	0-5 A/V	0-50 A/V
200V	0-0.05 A/V	0-5 A/V	0-5 A/V
600V	0-0.016 A/V	0-1.66 A/V	0-1.666 A/V

INPUT CHARACTERISTICS:

