



GENERAL SPECIFICATIONS

OPERATION

Constant Current: 0 to selected full scale current

Prog. Accuracy
(Range): (high/med) ranges: $\pm 0.5\%$
(low) range: $\pm 0.5\%$

Regulation: $\pm 0.1\%$ of selected full scale
Resolution(IEEE): 1/4000 of selected full scale

Constant Resistance: Constant Resistance mode operates in
Amps/Volt, IEEE units entered in ohms or A/V

Prog. Accuracy: $\pm 3\%$ of selected full scale
Regulation: $\pm 3\%$ of selected full scale
Resolution(IEEE): 1/4000 of selected full scale

Constant Voltage: 0 to selected selected full scale
Prog. Accuracy

(Range):
(high/med) ranges: $\pm 0.5\%$
(low): $\pm 0.5\%$

Regulation: $\pm 0.15\%$ of selected full scale
Resolution(IEEE): 1/4000 of selected full scale

Constant Power: 0 to full scale power

Prog. Accuracy: $\pm 3\%$ of full scale
Regulation: $\pm 3\%$ of full scale
Resolution(IEEE): 1/4000 of full scale power

ANALOG MODE

Ext. Prog: 0 to 10 Volts input yields 0 to selected full scale
loading in all operating modes.

Input Impedance: 330k Ohms
Prog. Response: Limited by internal
adjustable slew rate limiter

Frequency: 0 to 20 KHz in CI mode

PULSE MODE

Frequency: 0.06Hz to 3.333kHz
Accuracy: 0.1%
Duty Cycle: .1% to 99.9%
Accuracy: 0.1%

Adjustable Slew Rate:

*Max: 0 to full scale in 10 μ S
Min: 0 to full scale in .4 sec.

OUTPUT SIGNALS

Current Sample Output:

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

Sync Output:

Timing: Synchronous with pulse generator.
Output: Sink with 10k pull up to +15V

PROTECTION

Current Limit:

Range(IEEE): 0 - 105% of selected full scale
Resolution(IEEE): 1/256 of selected full scale

Voltage Limit:

Range(IEEE): 0 - 105% of selected full scale
Resolution(IEEE): 1/256 of selected full scale

Power Limit:

Range(IEEE): 0 - 6300 Watts
Resolution(IEEE): 1/256 of full scale

Thermal:

Load disconnect at internal
temperature of 105°C
Undervoltage: Load inhibited at less than 1
Volt, when enabled

IEEE-488 READBACKS

Current:

Resolution: 1/4000 of Selected Full Scale
Accuracy(Range): (High/Med): $\pm 0.25\% \pm 1$ Digit
(Low): $\pm 0.5\% \pm 1$ Digit

Voltage:

Resolution: 1/4000 of Selected Full Scale
Accuracy(Range): (High/Med): $\pm 0.25\% \pm 1$ Digit
(Low): $\pm 0.5\% \pm 1$ Digit

Power:

Resolution: 1 Watt
Accuracy: 0.50%

MISCELLANEOUS

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

MECHANICAL

Weight: 95 lbs. / 43.2 kg

* Note: Testing performed using low inductance cables in CI mode with a high capacity source.

The broad range of power ratings (up to 6000 watts), voltage and currents ratings (Up to 600 amperes at 1.0 volts and up to 600 volts at 10 amperes) together with precision ethernet control, IEEE488, and RS232 readback makes the RBL488 Series of electronic loads an ideal choice for general as well as special purpose testing of power supplies, batteries, fuel cells generators and DC Power Sources.

Features include constant resistance, constant voltage, constant current, constant power and pulse load transient testing with selectable 4000 bit resolution readback scales of voltage, current and power.

- High Speed Adjustable Slew Rate
- Front Panel or Remote Control
- Operation to Less Than 200mv
- Pulse Load Shaping
- Full Range Switching
- Quiet Variable Speed Fans
- Programmable Undervoltage

RBL488 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

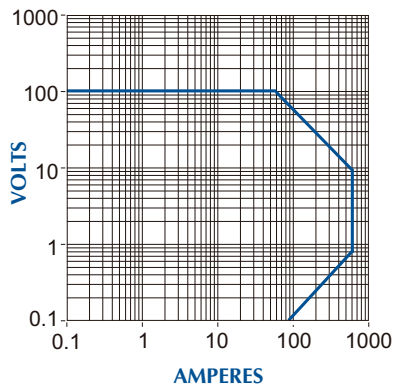
High Ohms Mode

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:



RBL488 400-600-6000

OPERATING RANGES (FULL SCALES)

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

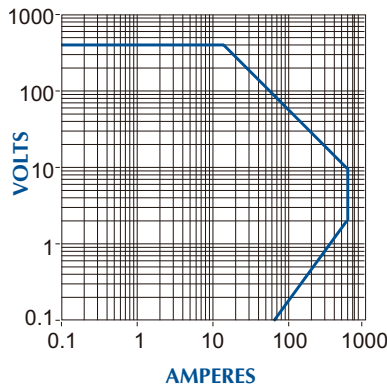
High Ohms Mode

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:



RBL488 600-200-6000

OPERATING RANGES (FULL SCALES)

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	0-0.5 A/V
600V	0-0.0016 A/V	0-0.016 A/V	0-0.166 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	0-0.166 A/V	0-1.666 A/V

INPUT CHARACTERISTICS:

