



## RBL488 SERIES 6000 WATTS



### 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 $\mu$ 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

\* 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

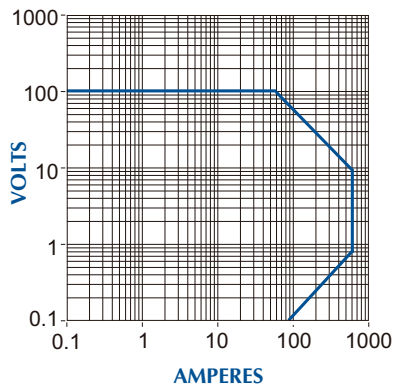
#### High Ohms Mode

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

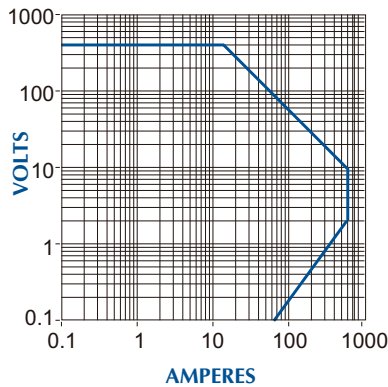
#### High Ohms Mode

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	0-5 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:

