

# Data Sheet

## Dual Range DC Power Supplies Models 1737 & 1747



B&K Precision's models 1737 and 1747 are general purpose dual range DC power sources. These power supplies can output higher voltage at a lower current range or more current at a lower voltage range. Two 4-digit LED displays continuously monitor the output voltage and current. The power supplies can be operated locally from the front panel or remotely through the RS-232 interface.

The 1737 and 1747 both exhibit excellent regulation and low ripple characteristics. Their mechanical configuration conserves bench space and allows for easy portability.

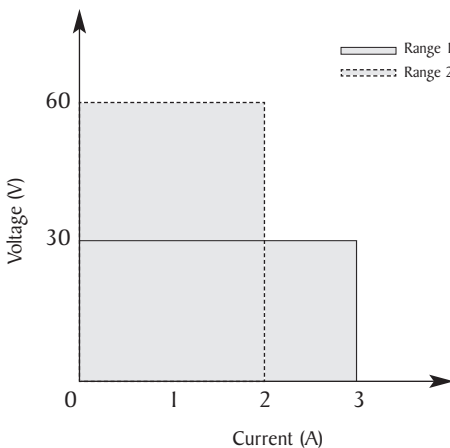
These power supplies are well-suited for a wide variety of electrical and electronics applications in service shops, engineering labs, production, school laboratories, and home use.

### Features and Benefits

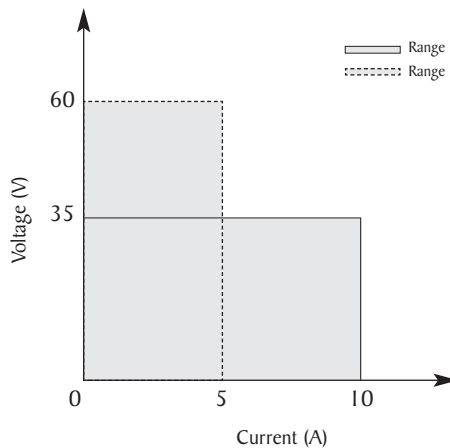
- Dual range to accommodate applications requiring either a higher voltage or a higher current
- Low ripple and noise
- Excellent regulation
- Constant voltage (CV) and constant current (CC) mode operation
- Two 4-digit LED displays provide good visibility in bright or low light
- LED indication for CV and CC modes
- Automatic recall of last settings on power up
- RS-232 interface
- Front panel emulation software available for download
- Isolated output
- Overload protection
- Reverse polarity protection

Output Ratings/Model	1737	1747
Voltage	0 - 60 V	
Current	0-3 A (0-30 V range) 0-2 A (0-60 V range)	0-10 A (0-35 V range) 0-5 A (0-60 V range)

1737 Operating Range



1747 Operating Range

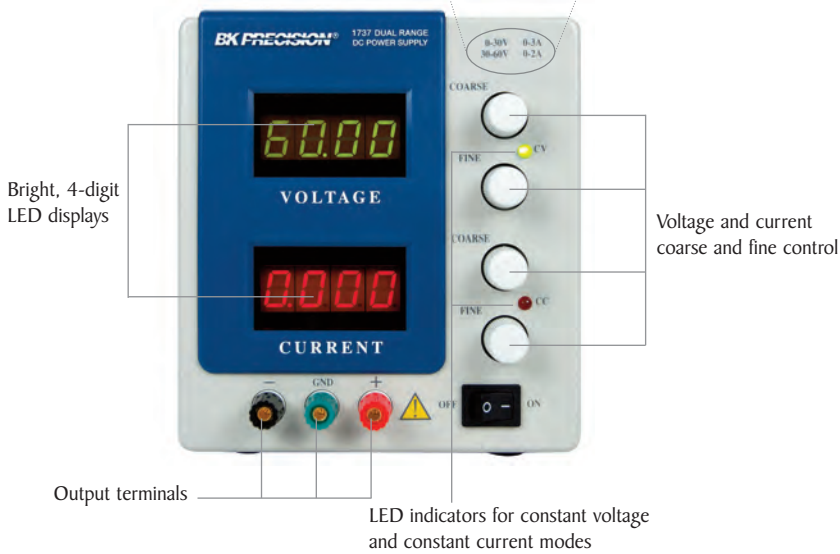


## Front Panels

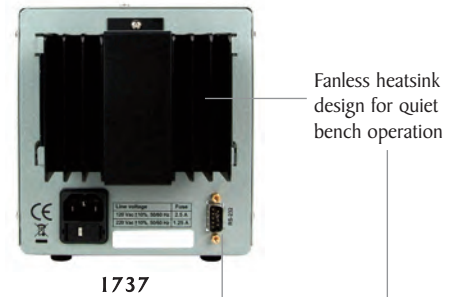
### Two Power Supplies in One

The 1737 and 1747's unique dual range feature offers the best of both worlds by supplying two different ranges with either higher voltage or more current depending on your application, avoiding the higher cost of buying more power than necessary.

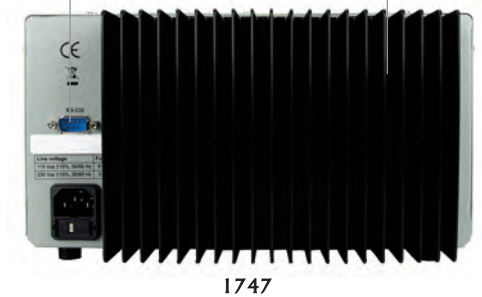
0-30V 0-3A  
30-60V 0-2A



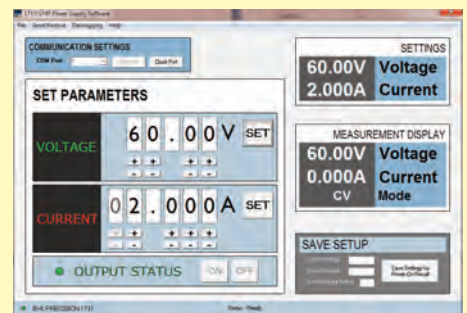
## Rear Panels



RS-232 interface enables the instrument to be remotely controlled via PC



## Software Application



Utilize B&K Precision's application software, available for download at [www.bkprecision.com](http://www.bkprecision.com). This software provides a virtual front panel and a simple data logging function to store and log data to a text or CSV file.



## Specifications

Model	1737	1747
<b>Output Ratings (0 °C~40 °C)</b>		
Voltage	0-60 V	
Current	0-3 A (0-30 V range) 0-2 A (0-60 V range)	0-10 A (0-35 V range) 0-5 A (0-60 V range)
<b>Load Regulation ±(% of output+offset)</b>		
Voltage	0.01% + 3 mV	0.01% + 5 mV
Current	0.2% + 3 mA	
<b>Line Regulation ±(% of output+offset)</b>		
Voltage	0.01% + 3 mV	
Current	0.2% + 3 mA	
<b>Ripple &amp; Noise (20 Hz ~ 20 MHz)</b>		
Voltage	1 mVrms	
Current	≤ 3 mArms	
<b>Recovery Time</b>		
Time	≤ 100 μs	
<b>Meter Resolution</b>		
Voltage	10 mV	
Current	1 mA	1 mA (0-5 A) 10 mA (5-10 A)
<b>Meter Accuracy</b>		
Voltage	0.5% + 9 digits	0.5% + 5 digits
Current	0.5% + 9 digits	0.5% + 5 digits
<b>General</b>		
Power Requirements	120/220 VAC ±10%, 50/60 Hz	115/230 VAC ±10%, 50/60 Hz
Power Consumption	≤ 180 VA	≤ 560 VA
Protection	Reverse polarity, current limiting	
<b>Operating Environment</b>		
Temperature	32 °F to 104 °F (0 °C to 40 °C)	
Humidity	75% R.H.	
Temperature coefficient (0 °C~35 °C) (%of output+offset)	300 ppm/°C	
Storage Temperature	5 °F to 158 °F (-15° to +70° C)	
Storage Humidity	85% R.H.	
<b>Mechanical Specifications</b>		
Weight	10.5 lbs (4.8 kg)	30.2 lbs (13.7 kg)
Dimensions (W x H x D)	5.5" x 6.2" x 12.5" (140 x 158 x 318 mm)	10.75" x 6" x 14" (273 x 153 x 356 mm)
<b>Two Year Warranty</b>		
Included Accessories: Power cord, instruction manual, RS-232 cable, shorting bar		

Note: All specifications apply to the unit after a temperature stabilization time of 30 minutes.