

Data Sheet

High Power Switching DC Power Supplies Models 1900, 1901 & 1902



Full-Featured DC Power Supplies to Meet Your High Power Needs

B&K Precision models 1900, 1901, and 1902 are laboratory grade switching DC power supplies with high current output in a small, lightweight form factor. The 1900 Series provide various configurations of high output voltage or high output current and feature rotary encoder control knobs, which make setting voltage and current fast and precise. Its dual action push button allows the user to set both coarse and fine, voltage and current levels.

In addition to constant voltage (CV) and constant current (CC) modes, the high efficiency DC power supply offers a unique solution with

its preset and remote control modes. Save up to three different presets of voltage and current values for quick recall. The analog remote control function allows the output power, voltage, and current to be adjusted without touching the front panel of the power supply. A remote sensing terminal (model 1900 only) is also available to compensate for voltage drop across load leads.

These features make the 1900, 1901, and 1902 suitable for a wide range of applications requiring high current including production testing, telecommunications, R&D, service, and university labs.

Features and Benefits

- Automatic CV (Constant Voltage)/CC (Constant Current) crossover operation
- Up to 60 A output current
- Lightweight and compact
- Rotary encoder control for precise voltage and current setting
- Save up to 3 user-defined voltage and current presets for quick recall
- Analog remote control function
- Remote sensing terminal (model 1900 only)
- Overvoltage, overtemperature, and overload protection
- Flexible operating modes: Front panel (normal), Preset, or Remote Control
- Front panel 5 amp auxiliary output

| Outputs/Model | 1900 | 1901 | 1902 |
|-------------------------|----------|----------|----------|
| Variable Output Voltage | 1 - 16 V | 1 - 32 V | 1 - 60 V |
| Variable Output Current | 0 - 60 A | 0 - 30 A | 0 - 15 A |

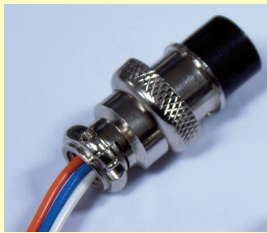
Designed to Make Your Work Easier

Fully Protected

Have peace of mind knowing that these power supplies come with built-in OVP (overvoltage protection), OTP (overtemperature protection), and OLP (overload protection) circuitry. These protections help prevent serious damage to equipment in case of power supply failure.

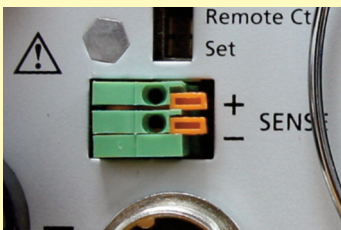
Custom Presets

Quickly use common voltage and current settings with a flip of the Recall preset switch. Up to three different presets can be set and recalled.



Analog Remote Control Capability

Use the included connector to wire up to an external variable DC voltage source or variable resistor to remotely control the power supply's output voltage and current or to turn the output on/off.



Remote Sense (Model 1900 only)

Improve regulation of the power supply's output voltage at the load by using the remote sense terminals to compensate for voltage drop across load leads.

Flexibility & Performance



Specifications

| Models | 1900 | 1901 | 1902 |
|--|---|--|--|
| Output | | | |
| Variable Output Voltage | 1 – 16 V | 1 – 32 V | 1 – 60 V |
| Variable Output Current | 0 – 60 A | 0 – 30 A | 0 – 15 A |
| Auxiliary Output Current | 5 A | | |
| Voltage Regulation | | | |
| Load (0-100% Load) | ≤ 50 mV | | |
| Line (90-132 VAC, 170-264 VAC Variation) | ≤ 20 mV | | |
| Current Regulation | | | |
| Load (10-90% Rated Voltage) | ≤ 200 mA | ≤ 150 mA | ≤ 100 mA |
| Line (90-132 VAC, 170-264 VAC Variation) | ≤ 50 mA | | |
| Ripple & Noise | | | |
| Ripple & Noise Voltage (rms) | ≤ 5 mV | | |
| Ripple & Noise Voltage (peak-peak) | ≤ 50 mV | ≤ 50 mV | ≤ 100 mV |
| Current Ripple & Noise (rms) | ≤ 100 mA | ≤ 50 mA (110 VAC) ≤ 40 mA (230 VAC) | ≤ 15 mA |
| Meter Type & Accuracy | | | |
| Voltage Meter | 3-Digit LED Display ± 0.2% + 3 counts | | |
| Current Meter | 3-Digit LED Display ± 0.2% + 3 counts | | |
| Other | | | |
| AC Input | 100 - 120 VAC 60 Hz, 220 - 240 VAC 50 Hz* | | |
| Full Load Input Current | 9.4 A (110 VAC) 4.7 A (230 VAC) | 9.0 A (110 VAC) 4.5 A (230 VAC) | 9.3 A (110 VAC) 4.5 A (230 VAC) |
| Efficiency | 84% (110 VAC) 85% (230 VAC) | 87% (110 VAC) 86% (230 VAC) | 87% (110 VAC) 88% (230 VAC) |
| Switching Frequency | 65 – 85 kHz | 75 – 95 kHz | 65 – 85 kHz |
| Tracking Overvoltage Protections | O/P 1-5 V: set voltage +2 V O/P 5-16 V: set voltage +3 V | O/P 1-5 V: set voltage +2 V O/P 5-20 V: set voltage +3 V O/P 20-32 V: set voltage +4 V | O/P 1-5 V: set voltage +2 V O/P 5-20 V: set voltage +3 V O/P 20-60 V: set voltage +4 V |
| Transient Response Time (50-100% Load) | 1.5 ms | | |
| Power Factor Correction | > 0.95 at optimal load | | |
| Cooling Method | Thermostatically controlled fan from zero to full speed | | |
| Protections | Overload, Short Circuit by Constant Current, Overvoltage, Overtemperature | | |
| Special Features | 3 User-Defined Voltage and Current Presets, Analog Remote Control, Remote Sense (model 1900 only) | | |
| Operating Temperature | 32 °F to 104 °F (0 °C to 40 °C), ≤ 80% R.H. | | |
| Storage Temperature | 5 °F to 158 °F (-15 °C to 70 °C), ≤ 85% R.H. | | |
| Dimensions (W x H x D) | 7.9" x 3.5" x 10.8" (200 x 90 x 275 mm) | | |
| Weight | 7 lbs (3.2 kg) | | |
| Two-Year Warranty | | | |
| Included Accessories | Power cord, instruction manual, remote control connector | | |

Note: All specifications apply to the unit after a temperature stabilization time of 15 minutes over an ambient temperature range of 23 °C ± 5 °C.

*Special order instructions: For 230 V version, request model 1900-220 V, 1901-220 V, or 1902-220 V.

Компания «Life Electronics» занимается поставками электронных компонентов импортного и отечественного производства от производителей и со складов крупных дистрибьюторов Европы, Америки и Азии.

С конца 2013 года компания активно расширяет линейку поставок компонентов по направлению коаксиальный кабель, кварцевые генераторы и конденсаторы (керамические, пленочные, электролитические), за счёт заключения дистрибьюторских договоров

Мы предлагаем:

- Конкурентоспособные цены и скидки постоянным клиентам.
- Специальные условия для постоянных клиентов.
- Подбор аналогов.
- Поставку компонентов в любых объемах, удовлетворяющих вашим потребностям.
- Приемлемые сроки поставки, возможна ускоренная поставка.
- Доставку товара в любую точку России и стран СНГ.
- Комплексную поставку.
- Работу по проектам и поставку образцов.
- Формирование склада под заказчика.
- Сертификаты соответствия на поставляемую продукцию (по желанию клиента).
- Тестирование поставляемой продукции.
- Поставку компонентов, требующих военную и космическую приемку.
- Входной контроль качества.
- Наличие сертификата ISO.

В составе нашей компании организован Конструкторский отдел, призванный помогать разработчикам, и инженерам.

Конструкторский отдел помогает осуществить:

- Регистрацию проекта у производителя компонентов.
- Техническую поддержку проекта.
- Защиту от снятия компонента с производства.
- Оценку стоимости проекта по компонентам.
- Изготовление тестовой платы монтаж и пусконаладочные работы.



Тел: +7 (812) 336 43 04 (многоканальный)

Email: org@lifeelectronics.ru