PowerPac™ HV

high-voltage power supply

PROTEAN® II Ready Gel® Precast Gel System

Model 111 Mini IEF Cell

Rotofor® Cell and Mini Rotofor Cell

Plug in for great performance.

BIO-RAD

Powered Up!

The PowerPac HV high-voltage power supply supports an increased output of 5,000 V, 500 mA, or 400 W, which allows you to drive all high-voltage applications, including low-current applications in the microampere range. It is ideal for isoelectric focusing (IEF) and DNA sequencing. With 400 W output, the PowerPac HV offers enough power to run the most demanding IEF or DNA sequencing experiments.

Data Tracking via Easy-to-Use Software

With the optional PowerPac™ data transfer software, it's easy to organize, display, print, analyze, export, and annotate run data from the PowerPac HV power supply. Send run data first to a personal digital assistant (PDA) and then to a PC, or directly to a PC with a peripheral IR-receiving device. Once data are collected from the PowerPac HV, the data transfer software allows the operator to:

- View and track the programmed method
- See actual method and run conditions (voltage, current, power, method edits, error conditions, run date and time) recorded periodically during the run
- Annotate a run with notes
- Identify the serial number of the unit that generated the data
- Document all run-related information with reports
- Organize run data into projects
- Customize data presentation

IEF separation with voltage ramping.

Innovative Wireless Data Transfer

The PowerPac HV high-voltage power supply uses an integral IR port to transmit data to a PC either via a handheld PDA or directly via an IR-receiving device with the optional PowerPac data transfer software. With the IR receiver and PowerPac data transfer software, the PowerPac HV can be placed anywhere in the laboratory with respect to the PC. The recorded data include:

- The unit's unique serial number (to identify each data-generating PowerPac power supply)
- Programmed methods
- Actual run conditions recorded throughout the run
- User notes entered post-run
- A date/time stamp from the onboard real-time clock

Built for the Real World

The PowerPac HV power supply is designed for long-term reliability. Each power supply is manufactured in a state-of-the-art facility with automated testing equipment to ensure that it arrives at your laboratory ready to deliver top performance.

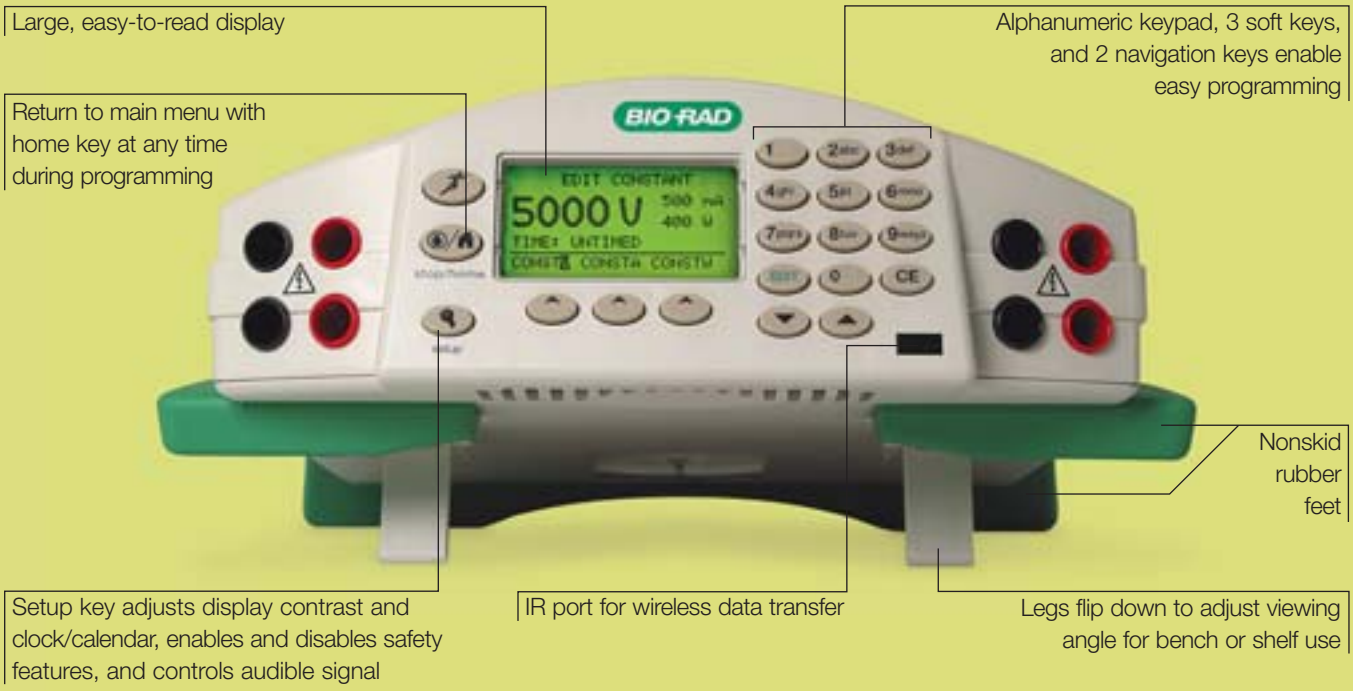
Extraordinary User Interface and Programmability

The alphanumeric keypad and graphics display combine for straightforward programming of single- or multi-step methods. The PowerPac HV user interface provides:

- Simple methods programming for starting a run
- Repeat of the previous run with a single keystroke
- Continuous, timed, or volt-hour operation
- A running screen displaying large numbers that can be seen from a distance, as well as helpful run details such as the constant variable, elapsed time, and volt-hours

A Helping Hand With IQ/OQ

To support installation qualification and operational qualification (IQ/OQ) within GLP- and FDA-regulated environments, a PowerPac IQ/OQ protocol binder and test box are available for use exclusively with the PowerPac HV and PowerPac™ Universal power supplies. The first part of the user-customizable PowerPac IQ/OQ protocol provides an installation checklist and procedure to check performance of a newly installed PowerPac HV. The second part of the protocol checks actual performance against specified performance over time. The test box houses a factory-calibrated resistive load. When used with the appropriate meters to monitor output voltage and current, the test box determines the power supply's performance against its specifications.



PowerPac HV high-voltage power supply

Specifications

Output (programmable)	
Voltage	20–5,000 V
Current	0.01–500 mA
Power	1–400 W
Type of output (with automatic crossover)	Constant voltage, constant current, constant power, or constant temperature
Timer control	1 min to 99 hr, 59 min
Volt-hour control	Yes, 99,999 V-hr
Pause/resume function	Yes
Display functions	128 x 64 pixel, yellow-green backlit graphics LCD
Programmable methods	Stores up to 9 basic and 9 IEF methods, each with up to 9 steps
Real-time editing	Yes
Real-time clock	Yes
Automatic recovery after power failure	Yes, user-selectable; setup values maintained
Data transfer/archiving	Yes
Temperature control	Yes, via temperature probe; 30–90°C ± 2°C
Microampere readout and control	Yes
Safety features	No-load detection, sudden load change detection, ground leak detection, overload/short circuit protection, overvoltage protection
Operating conditions	0–40°C, 0–95% humidity
Stackable	Yes
Number of output jacks	4 sets in parallel
Regulatory	EN-61010, CE
IQ/OQ protocols	Yes
Input power (actual)	90–120 or 198–264 VAC, 50 or 60 Hz, autoswitching
Dimensions (W x D x H)	27.5 x 34 x 10 cm
Weight	2.85 kg (6.3 lb)

Minimum Hardware Requirements for PowerPac Data Transfer Software

PC requirements	Windows XP or 2000 operating system
	400 MHz processor
	256 MB RAM minimum, 512 MB recommended
	1,024 x 768 pixel screen resolution with true-color mode (24 or 32 bits)
	6 GB hard drive
	CD-ROM drive
	IR port
PDA requirements	Palm OS software version 4.0 or 5.0
	8 MB memory

Ordering Information

Catalog #	Description
PowerPac HV Power Supply and Accessories, 100–120/220–240 V	
164-5056	PowerPac HV Power Supply, includes power cord, instructions
164-5059	PowerPac HV Power Supply With Temperature Probe
164-5097	PowerPac HV Data Transfer Software
164-5098	PowerPac HV IQ/OQ Protocol Binder and Test Box
164-5099	PowerPac HV IQ/OQ Protocol Binder

BIO-RAD

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Life Science Group

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