

EA-PS 2000 B SINGLE 100W - 320W 实验室直流电源 / LABORATORY DC POWER SUPPLIES



EA-PS 2084-05 B

- 微处理器控制
- 专为下列应用而设计
 - 学校，大学与实验室
 - 工业与系统应用
 - 工厂车间与研发部
 - 实验室与测试机构
- 输出功率分别有：100W, 160W 或 320W*
- 输出电压：0...42V 与 0...84V
- 输出电流：高达0...20A
- 带过温保护 (OT)
- 四位数显示屏指示电压和电流
- 自然对流冷却
- 密封式上盖与底座
- 安全输出插座
- 符合EN 60950安规标准

- **Microprocessor controlled**
- **Designed for**
 - **Schools, university, educational facilities**
 - **Industry and system applications**
 - **Workshop and development**
 - **Laboratories and test institutes**
- **Output power ratings: 100W, 160W or 320W**
- **Output voltages: 0...42V and 0...84V**
- **Output currents: up to 0...20A**
- **Overtemperature protection (OT)**
- **Four-digit display for voltage and current**
- **Convection cooling**
- **Chassis top and bottom closed**
- **Safety output sockets**
- **Safety EN60950**

概要

EA-PS 2000 B系列实验室电源有三种额定输出功率，100W，160W和320W*。本系列的优点为结构紧凑，外壳实用，输出参数优越。其上下盖完全封闭，无外置散热片。故特别适用于学校和培训机构。

产品前板装有安全输出插座。可从零至所需电压和电流之间自由调节。该系列允许多个并联或串联。灵活的功率管理系统保证在满载时操作稳定可靠。

保护功能

本系列除了具有标准保护功能如过压保护(OVP)外，还可阻止峰值电压或高电压输送给用户应用设备。并带可调极限(0...110%额定电流)的过流保护特性，过流时它会即刻切断输出，从而避免损坏应用设备。

*自2012年6月始有供货

General

The laboratory power supplies of the EA-PS 2000 B series are available in three power ratings of 100W, 160W or 320W*. The series demonstrates compact design, practical housing and excellent value. The units are closed at top and bottom and have no external heatsinks. Thus they are especially suitable for use in schools and training establishments. The safety output sockets are located on the front face of the unit. Voltage and current can be adjusted from zero to the required value. The units can be connected in parallel or in series. A flexible power management ensures reliable operation at full load.

Protective features

Besides standard features like overvoltage protection (OVP), which is intended to protect sensitive user applications against unwanted voltage peaks or high voltage, the series now features an overcurrent protection with an adjustable threshold of 0...110% nominal current. It will protect a malfunctioning application from overcurrent by immediate output shutdown.

*Available from June 2012

EA-PS 2000 B SINGLE 100W - 320W

实验室直流电源 / LABORATORY DC POWER SUPPLIES

电脑接口

利用标准USB端口和Windows软件，可监控和远程控制本系列产品。要解锁产品及使软件能完全工作，需为每台产品购买一许可证。随附软件套件有一条USB线，可用它将电脑与产品连接起来。还可提供LabView™ VIs和编程文档。

灵活可选的功率范围

设定电压和电流值可相互调整，根据 $P = U \cdot I$ 公式，保证这些输出值维持在最大输出功率范围内。这样用户可选择输出高电压或大电流。

控制和监控软件

EasyPS2000软件以CD方式供应，该软件能完全远程控制或监控本产品。在图形用户界面上显示所有功能。该软件的多实例模式允许同步控制多台产品。

主要特征:

- 事件日志
- 解开产品许可证对话框
- 通过CSV表格进行自动控制（排序）
- 以CSV格式记录数据
- 兼容Windows
- 使用简便的图形用户界面
- 一台PS 2000 B产品一个实例

选项功能

- EasyPS2000软件的产品许可证

PC interface

The unit can be monitored and remotely controlled by a Windows software and via an USB port which is equipped as standard. In order to unlock a device and to enable full functionality of the software, it is required to purchase a licence for every unit. Connection to the PC is done with the USB cable, which is included with the software kit. LabView™ VIs and programming documentation are also available.

Flexible power ranging

The set values of voltage and current adjust each other in order to maintain the max. output power according to $P = U \cdot I$. This allows to work with either high output voltage or with high output current.

Control and monitoring software

The software EasyPS2000, which is contained on an optionally available software CD, allows complete remote control or monitoring of the device. All functions of the device are also available on the graphical user interface. Multiple instances of the software allow control of several units simultaneously. The main features:

- Event log
- Unlocking dialogue for device licences
- Automated control by CSV tables (sequencing)
- Data logging to CSV
- Windows compatible
- Easy to use GUI
- One PS 2000 B per instance

Options

- Device licence for EasyPS2000 control software

技术参数	Technical Data	PS 2042-06B	PS 2042-10B	PS 2042-20B	PS 2084-03B	PS 2084-05B	PS 2084-10B
输入电压	Input voltage	90...264V	90...264V	90...264V	90...264V	90...264V	90...264V
-频率	-Frequency	45...65Hz	45...65Hz	45...65Hz	45...65Hz	45...65Hz	45...65Hz
-功率因数	-Power factor	>0.99	>0.99	>0.99	>0.99	>0.99	>0.99
输出电压	Output voltage	0...42V	0...42V	0...42V	0...84V	0...84V	0...84V
-负载0-100%时的稳定度	-Stability at 0-100% load	<0.15%	<0.15%	<0.15%	<0.15%	<0.15%	<0.15%
-在±10% ΔU _{IN} 时的稳定度	-Stability at ±10% ΔU _{IN}	<0.02%	<0.02%	<0.02%	<0.02%	<0.02%	<0.02%
-纹波 BWL 20MHz	-Ripple BWL 20MHz	<80mV _{PP} 9mV _{RMS}	<80mV _{PP} 9mV _{RMS}	<80mV _{PP} 9mV _{RMS}	<60mV _{PP} 10mV _{RMS}	<60mV _{PP} 10mV _{RMS}	<60mV _{PP} 10mV _{RMS}
-负载从10%-100%调整需时	-Regulation 10-100% load	<1ms	<2ms	<2ms	<2ms	<1ms	<1ms
-OVP过压保护调节范围	-OVP adjustment	0...46.2V	0...46.2V	0...46.2V	0...92.4V	0...92.4V	0...92.4V
-精确度	-Accuracy	≤0.2%	≤0.2%	≤0.2%	≤0.2%	≤0.2%	≤0.2%
输出电流	Output current	0...6A	0...10A	0...20A	0...3A	0...5A	0...10A
-0-100% ΔU _{OUT} 时的稳定度	-Stability at 0-100% ΔU _{OUT}	<0.05%	<0.05%	<0.05%	<0.05%	<0.05%	<0.05%
-在±10% ΔU _{IN} 时的稳定度	-Stability at ±10% ΔU _{IN}	<0.15%	<0.15%	<0.15%	<0.15%	<0.15%	<0.15%
-纹波	-Ripple	<25mA _{PP} 9mA _{RMS}	<40mA _{PP} 15mA _{RMS}	<80mA _{PP} 30mA _{RMS}	<6mA _{PP} 2mA _{RMS}	<9mA _{PP} 3mA _{RMS}	<18mA _{PP} 6mA _{RMS}
-精确度	-Accuracy	≤0.2%	≤0.2%	≤0.2%	≤0.2%	≤0.2%	≤0.2%
效率	Efficiency	85%	85%	85%	85%	85%	85%
输出功率	Output power	100W	160W	320W	100W	160W	320W
保护级别	Protection class	1					
制冷方式	Cooling	无风扇，自然对流冷却 / fanless, natural convection					
工作温度	Operation temperature	0...50°C					
储存温度	Storage temperature	-20...70°C					
尺寸 (WxHxD)	Dimensions (WxHxD)	174x82x240mm	174x82x240mm	174x82x320mm	174x82x240mm	174x82x240mm	174x82x320mm
重量	Weight	1.9kg	2kg	2.3kg	1.9kg	2kg	2.3kg
产品编号	Article No.	39200112	39200113	39200114	39200116	39200117	39200118

EA-PS 2000 B TRIPLE 212W / 332W 实验室直流电源 / LABORATORY DC POWER SUPPLIES



- 专为下列应用而设计
 - 学校，大学与实验室
 - 工业与系统应用
 - 工厂车间与研发部
 - 实验室与测试机构
- 输出电压: 2x 0...42V 或 2x 0...84V
- 输出电流: 0...3A, 0...5A, 0...6A 或 0...10A
- 辅助输出: 3...6V, 12W
- 带过温保护 (OT)
- 四位数字显示屏指示电压和电流
- 自然对流冷却
- 密封式上盖与底座
- 安全输出插座

- **Designed for**
 - **Schools, university and educational facilities**
 - **Industry and system applications**
 - **Workshop and development**
 - **Laboratories and test institutes**
- **Output voltages: 2x 0...42V or 2x 0...84V**
- **Output currents: 0...3A, 0...5A, 0...6A or 0...10A**
- **Auxiliary output: 3...6V, 12W**
- **Overtemperature protection (OT)**
- **Four-digit display for voltage and current**
- **Convection cooling**
- **Chassis top and bottom closed**
- **Safety output sockets**

概要

EA-PS 2000 B Triple系列实验室电源输出两组主输出，功率可为100W或160W，另外还有一组3...6V与12W的辅助输出。

新的“追踪”功能，让用户通过控制面板左边的旋钮可同时控制这两组输出。它们之间相互隔离，可以串联或并联。结合该追踪特征，用户可以设置另外一不同的输出，如±15V。

安全输出插座位于产品前板。能从零到最大值之间调节电压和电流。

保护功能

本系列除了具有标准保护功能如过压保护(OVP)外，还可阻止峰值电压或高电压输送给用户应用设备。并带可调极限(0...110%额定电流)的过流保护特性，过流时它会即刻切断输出，从而避免损坏应用设备。

General

The power supplies of the EA-PS 2000 B Triple series have two main outputs of 100W or 160W each and an auxiliary output with 3...6V and 12W.

The new „Tracking“ feature provides simultaneous control of both main outputs with the adjustment knobs of the left-hand control panel. The outputs are galvanically isolated to each other and can be connected in series or parallel. In combination with the tracking feature, the user can set up a variable ±15V output, for example.

The safety output sockets are located on the front panel of the unit. Voltage and current can be adjusted from zero to maximum.

Protective features

Besides basic features like overvoltage protection (OVP), which is intended to protect sensitive user applications against unwanted voltage peaks or high voltage, the series now features an overcurrent protection with an adjustable threshold of 0...110% nominal current. It will protect a malfunctioning application from overcurrent by immediate output shutdown.

EA-PS 2000 B TRIPLE 212W & 332W

实验室直流电源 / LABORATORY DC POWER SUPPLIES

电脑接口

利用标准USB端口和Windows软件，可监控和远程控制本系列产品。要解锁产品及使软件能完全工作，需为每台产品购买一许可证。随附软件套件内有一条USB线，可用它连接电脑与产品。还可提供LabView™ VIs和编程文档。

灵活可选的功率范围

设定电压和电流值可相互调整，根据 $P = U \cdot I$ 公式，保证这些输出值维持在最大输出功率范围内。这样用户可选择输出高电压或大电流。

控制和监控软件

EasyPS2000软件以CD方式供应，该软件能完全远程控制或监控本产品。在图形用户界面上显示所有功能。该软件的多实例模式允许同步控制多台产品。

主要特征:

- 事件日志
- 解开产品许可证对话框
- 通过CSV表格进行半自动控制（排序）
- 以CSV格式记录数据
- 使用简便的图形用户界面
- 一台PS 2000 B产品一个实例

选项功能

- EasyPS2000软件的产品许可证

PC interface

The unit can be monitored and remotely controlled by a Windows software and via the standard USB port. In order to unlock a device and to enable full functionality of the software, it is required to purchase a licence for every unit. Connection to the PC is done with the USB cable which is included with the software kit. LabView™ VIs and programming documentation are also available.

Flexible power ranging

The set values of voltage and current adjust each other in order to maintain the max. output power according to $P = U \cdot I$. This allows to work with either high output voltage or with high output current.

Control and monitoring software

The software EasyPS2000, which is contained on an optionally available software CD, allows complete remote control or monitoring of the device. All functions of the device are also available on the graphical user interface. Multiple instances of the software allow control of several units simultaneously. The key features:

- Event log
- Unlocking dialogue for device licences
- Semi-automatic control by CSV tables (sequencing)
- Data logging to CSV
- Easy to use GUI
- One PS 2000 B per instance

Options

- Device licence for EasyPS2000 control software

技术参数	Technical Data	EA-PS 2342-06 B	EA-PS 2342-10 B	EA-PS 2384-03 B	EA-PS 2384-05 B
输入电压	Input voltage	90...264V	90...264V	90...264V	90...264V
-频率	-Frequency	45...65Hz	45...65Hz	45...65Hz	45...65Hz
-功率因数	-Power factor	>0.99	>0.99	>0.99	>0.99
输出电压	Output voltage	Output 1+2: 0...42V Output 3: 3...6V	Output 1+2: 0...42V Output 3: 3...6V	Output 1+2: 0...84V Output 3: 3...6V	Output 1+2: 0...84V Output 3: 3...6V
-负载0-100%时的稳定度	-Stability at 0-100% load	<0.15%	<0.15%	<0.15%	<0.15%
-在 $\pm 10\% \Delta U_{IN}$ 时的稳定度	-Stability at $\pm 10\% \Delta U_{IN}$	<0.02%	<0.02%	<0.02%	<0.02%
-纹波 BWL 20MHz	-Ripple BWL 20MHz	<80mV _{PP} / <9mV _{RMS}	<80mV _{PP} / <9mV _{RMS}	<60mV _{PP} / <10mV _{RMS}	<60mV _{PP} / <10mV _{RMS}
-负载从10%-90%调整需时	-Regulation 10-90% load	<2ms	<2ms	<2ms	<2ms
-OVP过压保护调节范围	-Overvoltage protection	0...46.2V	0...92.4V	0...46.2V	0...92.4V
-精确度	-Accuracy	≤0.2%	≤0.2%	≤0.2%	≤0.2%
输出电流	Output current	Output 1+2: 0...6A Output 3: max. 4A	Output 1+2: 0...10A Output 3: max. 4A	Output 1+2: 0...3A Output 3: max. 4A	Output 1+2: 0...5A Output 3: max. 4A
-0-100% ΔU_{OUT} 时的稳定度	-Stability at 0-100% ΔU_{OUT}	<0.15%	<0.15%	<0.15%	<0.15%
-1+2组输出的纹波	-Ripple output 1+2	<25mA _{PP} / 9mA _{RMS}	<40mA _{PP} / 15mA _{RMS}	<6mA _{PP} / 2mA _{RMS}	<9mA _{PP} / 3mA _{RMS}
-精确度	-Accuracy	≤0.2%	≤0.2%	≤0.2%	≤0.2%
-效率	Efficiency	85%	85%	85%	85%
输出功率	Output power	2x 100W + 1x 12W	2x 160W + 1x 12W	2x 100W + 1x 12W	2x 160W + 1x 12W
保护级别	Protection class	1			
制冷方式	Cooling	无风扇，自然对流冷却 / fanless, natural convection			
工作温度	Operation temperature	0...50°C			
工作温度	Storage temperature	-20...70°C			
尺寸 (WxHxD)	Dimensions (WxHxD)	外壳尺寸 / Enclosure: 282x82x243mm 整体尺寸 / Overall: 282x90x260mm			
重量	Weight	3.8kg	4kg	3.8kg	4kg
产品编号	Article No.	39200120	39200121	39200125	39200126