EV3000 Series

Electrophoresis power supplies

- **On screen help in 4 languages**
- **Real Time Clock**
- **Various running modes:**
  - Simple Mode
  - 9x9 Method Programming Mode
  - Voltage Ramp Mode
  - Timer Mode
- **Constant voltage/Constant current/Constant power**
- **Automatic cross-over**
- **Automatic recovery after power failure**
- **Password protection**
- **Data-logging**
- **Remote control via open communication protocol**
- **Safety features:**
  - Ground leakage detection
  - Overload protection
  - Smooth voltage rise
  - No load detection
  - Isolated USB communication
  - IEF Mode (EV2330 and EV3620)
- **Free software and firmware updates**







EIEF1100-SYS

EV3000 series contains 5 versions. The 3000V and 6000V version have a special low current mode for IEF applications. The IEF mode is for low current applications. The power supply can measure currents as low as 10 microAmps. All Consort power supplies can keep voltage constant at 0 current.

EV3020 (300V, 2000mA):
an excellent choice for blotting, multiple horizontal and vertical gels.
EV3610 (600V, 1000mA):
all round power supply suitable for most tanks and applications
EV3150 (1200V, 500mA):
suitable for higher voltage applications with a need for higher currents
EV3330 (3000V, 300mA):
high voltage with special low current mode (IEF-mode)
EV3620 (6000V, 150mA):
ultra high voltage with special low current mode (IEF-mode)

EV3000 series has a firmware upgrade capability and continuous logging with a real time clock. Consort Power Supplies are the most robust, long lasting and durable electrophoresis power supplies in the market.

Specifications depending on model

Power	300 W
Voltage	0-300 V to 0-6000V
Current	0-150 mA to 0-2000mA
Outputs	4
Operating Modes	4 Simple Mode 9x9 Method Programming Mode Voltage Ramp mode Timer Mode (time or Vh) IEF Mode
USB interface	
Datalogging	
Real Time Clock	
Mutiple safety features	
Warranty	**36 months**
Made in Belgium	

Code	Description
EV3020	Power supply, 300 V, 2000 mA, 300 W
EV3610	Power supply, 600 V, 1000 mA, 300 W
EV3150	Power supply, 1200 V, 500 mA, 300 W
EV3330	Power supply, 3000 V, 300 mA, 300 W
EV3620	Power supply, 6000 V, 150 mA, 300 W
ESEQ1200-SYS	Sequencing unit 20x50 cm
EIEF1100-SYS	Isoelectric focusing system, 26x26 cm
➔ **Supplied with a european mains cord + USB cable**	

EV3000 series 300V to 1200V

Electrophoresis power supplies

Power	**300 W**
Voltage	**300 V to 1200V (3 versions)**
Current	**500 mA to 2000mA (3 versions)**
Outputs	**4**
Operating Modes	**4**
	Simple Mode
	9x9 Method Programming Mode
	Voltage Ramp mode
	Timer Mode (time or Vh)
USB interface	
Datalogging	
Real Time Clock	
Mutiple safety features	
Warranty	36 months
Made in Belgium	



Description

The high-power high-end EV3000 power supply series has 5 versions. In the 300V to 1200V range we have 3 versions:
EV3020 (300V, 2000mA): an excellent choice for blotting, multiple horizontal and vertical gels.
EV3610 (600V, 1000mA): our most popular all round power supply suitable for most tanks and applications
EV3150 (1200V, 500mA): suitable for higher voltage applications with a need for higher currents

The front panel and graphical display are designed for ease of use. The display provides all useful information during runs and will show an on screen help to guide the user in setting up the power supply. In Simple Mode you just have to set your power supply to the desired parameters and press run.

EV3000 series has a firmware upgrade capability so future improvements and features will always be available.

Moreover EV3000 series has a continuous logging combined with a real time clock so it's possible to get an overview of previous runs, including possible down-times in case of mains power failures.

The complete EV series can keep it's voltage constant at low currents without problem and will keep on functioning at low and high temperatures.

Consort Power Supplies are the most robust, long lasting and durable electrophoresis power supplies in the market.

Features

On screen help in 4 languages to assist setting up the power supply parameters and solve errors.

Firmware updates allows for upgrades to the latest version via the USB interface. Feature requests can also be implemented via the firmware system.

Real Time Clock date and time are kept in a battery backup system and is used logging an electrophoresis run.

Various running modes:
Simple Mode: just set voltage, current, power and time for a routine electrophoresis run.
9x9 Method Programming Mode: Up to 9 different programs, each with 9 steps, can be stored in the non-volatile memory.
Each step is able to recall a next one, providing a flexible multiple step function for special techniques. Parameters of the running step can be changed temporarily without interrupting the run.
Voltage Ramp Mode: a linear voltage gradient for any step provided the limiting current or power is not attained.
Timer Mode: Timer or volt-hour controlled operation will automatically stop the run and sound an alarm.

Automatic cross-over Each model has constant voltage, constant current, constant power capabilities with automatic cross-over and shows which parameter is kept constant.

Automatic recovery after power failure

Password protection

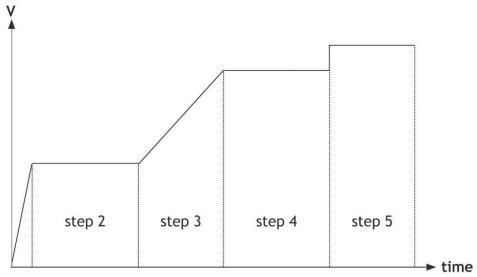
Data-logging Data logging of about 100 hours of runs are automatically stored. Data includes data/time, voltage, current, power and date/time of following events: start, stop, pause, program number, step, changes, mains failure and auto restart.

Data Transfer Free data acquisition software for PC can be downloaded from our website. It allows to visualize and examine the stored run details.

Remote control EV3000 series can be controlled by a computer using special commands. These commands can be found in the support section of our website.

Safety features:
Ground leakage detection: protection from potential shock hazard when a ground leakage path is detected.
Overload protection: full protection against any overload condition including accidental short circuit of the output.
Smooth voltage rise: high voltage cannot suddenly appear at the outputs but will increase smoothly up to the pre-set limits.
No load detection: prevents errors such as a bad or a dangling connection.
Isolated communication: Optically isolated USB input/output connection to prevent any high voltage on the communication lines.

Warranty 3 year warranty on factory faults.



Specifications

	EV3020	EV3610	EV3150
VOLTAGE	0...300 V	0...600 V	0...1200 V
CURRENT	0...2000 mA	0...1000 mA	0...500 mA
POWER	0...300 W	0...300 W	0...300 W
PARAMETER RANGE	1...100% of full scale	1...100% of full scale	1...100% of full scale
TIMER	0...99:59 h	0...99:59 h	0...99:59 h
VOLT-HOURS	0...99.99 kVh	0...99.99 kVh	0...99.99 kVh
DISPLAY	LCD, 2x16 characters	LCD, 2x16 characters	LCD, 2x16 characters
RESOLUTION	1 V, 1 mA, 1 W	1 V, 1 mA, 1 W	1 V, 1 mA, 1 W
MEASUREMENT RESOLUTION	1 V, 0.1 mA, 0.1 W	1 V, 0.1 mA, 0.1 W	1 V, 0.1 mA, 0.1 W
PROGRAMS	9x9 set of parameters	9x9 set of parameters	9x9 set of parameters
OUTPUTS	4 (4 mm sockets)	4 (4 mm sockets)	4 (4 mm sockets)
MINIMUM LOAD RESISTANCE	5 Ω	15 Ω	70 Ω
NO LOAD DETECTION	✓	✓	✓
GROUND LEAKAGE DETECTION	✓	✓	✓
OVERLOAD DETECTION	✓	✓	✓
COMPUTER CONTROL	✓	✓	✓
PASSWORD PROTECTION	✓	✓	✓
DATA-LOGGING	3600 values	3600 values	3600 values
INTERVAL	1...60 seconds	1...60 seconds	1...60 seconds
USB INTERFACE	✓	✓	✓
AMBIENT TEMPERATURE	0...40°C	0...40°C	0...40°C
RELATIVE HUMIDITY	0...95%, non condensing	0...95%, non condensing	0...95%, non condensing
POWER REQUIREMENTS	210...250 VAC, 50/60 Hz, 360 W 100...125 VAC, 50/60 Hz, 360 W	210...250 VAC, 50/60 Hz, 360 W 100...125 VAC, 50/60 Hz, 360 W	210...250 VAC, 50/60 Hz, 360 W 100...125 VAC, 50/60 Hz, 360 W
DIMENSIONS (WxDxH)	31x26x13 cm	31x26x13 cm	31x26x13 cm
WEIGHT	10 kg	10 kg	10 kg

EV3000 series 3000V to 6000V

Electrophoresis power supplies

Power	300 **W**
Voltage	**3000 V to 6000V (2 versions)**
Current	**150 mA to 300mA (2 versions)**
Outputs	**4**
Operating Modes	**5**
	Simple Mode
	9x9 Method Programming Mode
	Voltage Ramp mode
	Timer Mode (time or Vh)
	IEF Mode (ultra low current)
USB interface	
Datalogging	
Real Time Clock	
Mutiple safety features	
Warranty	36 months
Made in Belgium	



Description

The high-power high-end EV3000 power supply series has 5 versions. The 3000V and 6000V version have a special low current mode for IEF applications. The different IEF capable versions are:
EV3330 (3000V, 300mA): a high voltage power supply in a small form factor suitable for most high voltage applications
EV3620 (6000V, 150mA): a high voltage power supply in a small form factor suitable for most high voltage applications

The front panel and graphical display are designed for ease of use. The display provides all useful information during runs and will show an on screen help to guide the user in setting up the power supply. In Simple Mode you just have to set your power supply to the desired parameters and press run.

EV3000 series has a firmware upgrade capability so future improvements and features will always be available.

Moreover EV3000 series has a continuous logging combined with a real time clock so it's possible to get an overview of previous runs, including possible down-times in case of mains power failures.

Consort Power Supplies are the most robust, long lasting and durable electrophoresis power supplies in the market.

Features

On screen help in 4 languages to assist setting up the power supply parameters and solve errors.

Firmware updates allows for upgrades to the latest version via the USB interface. Feature requests can also be implemented via the firmware system.

Real Time Clock date and time are kept in a battery backup system and is used logging an electrophoresis run.

Various running modes:
Simple Mode: just set voltage, current, power and time for a routine electrophoresis run.
9x9 Method Programming Mode: Up to 9 different programs, each with 9 steps, can be stored in the non-volatile memory. Each step is able to recall a next one, providing a flexible multiple step function for special techniques. Parameters of the running step can be changed temporarily without interrupting the run.
Voltage Ramp Mode: a linear voltage gradient for any step provided the limiting current or power is not attained.
Timer Mode: Timer or volt-hour controlled operation will automatically stop the run and sound an alarm.
IEF Mode: special mode for low current applications such as IEF. The power supply can measure currents as low as 10 microAmps and can keep it's voltage constant at even 0 current.

Automatic cross-over Each model has constant voltage, constant current, constant power capabilities with automatic cross-over and shows which parameter is kept constant.

Automatic recovery after power failure

Password protection

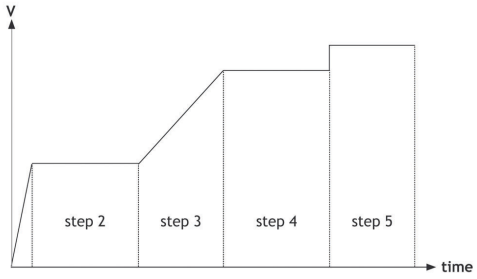
Data-logging Data logging of about 100 hours of runs are automatically stored. Data includes data/time, voltage, current, power and date/time of following events: start, stop, pause, program number, step, changes, mains failure and auto restart.

Data Transfer Free data acquisition software for PC can be downloaded from our website. It allows to visualize and examine the stored run details.

Remote control EV3000 series can be controlled by a computer using special commands. These commands can be found in the support section of our website.

Safety features:
Ground leakage detection: protection from potential shock hazard when a ground leakage path is detected.
Overload protection: full protection against any overload condition including accidental short circuit of the output.
Smooth voltage rise: high voltage cannot suddenly appear at the outputs but will increase smoothly up to the pre-set limits.
No load detection: prevents errors such as a bad or a dangling connection.
Isolated communication: Optically isolated USB input/output connection to prevent any high voltage on the communication lines.

Warranty 3 year warranty on factory faults.



Specifications

	EV3330	EV3620
VOLTAGE	0...3000 V	0...6000 V
CURRENT	0...300 mA	0...150 mA
POWER	0...300 W	0...300 W
PARAMETER RANGE	1...100% of full scale	1...100% of full scale
TIMER	0...99:59 h	0...99:59 h
VOLT-HOURS	0...99.99 kVh	0...99.99 kVh
DISPLAY	LCD, 2x16 characters	LCD, 2x16 characters
RESOLUTION	1 V, 1 mA, 1 W	1 V, 1 mA, 1 W
MEASUREMENT RESOLUTION	1 V, 0.1 mA, 0.1 W	1 V, 0.1 mA, 0.1 W
RESOLUTION IEF MODE	1 V, 0.01 mA, 0.01 W	1 V, 0.01 mA, 0.01 W
PROGRAMS	9x9 set of parameters	9x9 set of parameters
OUTPUTS	4 (4 mm sockets)	4 (2 mm sockets)
MINIMUM LOAD RESISTANCE	600 Ω	1200 Ω
IEF MODE	✓	✓
NO LOAD DETECTION	✓	✓
GROUND LEAKAGE DETECTION	✓	✓
OVERLOAD DETECTION	✓	✓
COMPUTER CONTROL	✓	✓
PASSWORD PROTECTION	✓	✓
DATA-LOGGING	3600 values	3600 values
INTERVAL	1...60 seconds	1...60 seconds
USB INTERFACE	✓	✓
AMBIENT TEMPERATURE	0...40°C	0...40°C
RELATIVE HUMIDITY	0...95%, non condensing	0...95%, non condensing
POWER REQUIREMENTS	210...250 VAC, 50/60 Hz, 360 W 100...125 VAC, 50/60 Hz, 360 W	210...250 VAC, 50/60 Hz, 360 W 100...125 VAC, 50/60 Hz, 360 W
DIMENSIONS (WxDxH)	31x26x13 cm	31x26x13 cm
WEIGHT	10 kg	10 kg

Application guide

Recommended power supply	EV1450	EV2310	EV2650	EV2320	EV3020	EV3610	EV3150	EV3330	EV3620
DNA SEQUENCING								✓	✓
FLAT BED ISOELECTRIC FOCUSING							✓	✓	✓
HORIZONTAL GEL	✓	✓	✓	✓	✓	✓	✓	✓	
LONG VERTICAL GEL									✓
VERTICAL GEL	✓	✓	✓	✓	✓	✓	✓	✓	
ELECTRO-ELUTION	✓		✓	✓		✓	✓		
WESTERN BLOTTING					✓				
SEMI-DRY BLOTTING					✓				
MINI WESTERN BLOTTING		✓							
MINI SEMI-DRY BLOTTING		✓							

Accessories

Code	Description
E200	Pair of adaptors, 4 mm plug to 2 mm socket
E201	Pair of cables M/F, 4+4 mm
E204	Pair of adaptors, 2 mm plug to 4 mm socket

Ordering codes

Code	Description
EV0220	Power supply, 200 V, 200 mA, 20 W
EV1450	Power supply, 400 V, 500 mA, 50 W
EV2310	Power supply, 300 V, 1000 mA, 150 W
EV2650	Power supply, 600 V, 500 mA, 150 W
EV2230	Power supply, 1500 V, 300 mA, 150 W
EV2320	Power supply, 3000 V, 150 mA, 150 W
EV3020	Power supply, 300 V, 2000 mA, 300 W
EV3610	Power supply, 600 V, 1000 mA, 300 W
EV3150	Power supply, 1200 V, 500 mA, 300 W
EV3330	Power supply, 3000 V, 300 mA, 300 W
EV3620	Power supply, 6000 V, 150 mA, 300 W

➔ **Supplied with a european mains cord + USB cable**

(Add a US-sign for US plug 120 VAC versions, e.g.: EV2650-US, Add a UK-sign for UK plug versions, e.g.: EV2650-UK, Add a CH-sign for Swiss plug versions, e.g.: EV2650-CH)