- 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
- 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, 200mA):

high voltage with special low current mode

EV3620 (6000V, 100mA):

ultra high voltage with special low current 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 V

 Voltage
 0-300 V to 0-6000V

 Current
 0-100 mA to 0-2000mA

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 Made in Belgium 36 months

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, 200 mA, 300 W	
EV3620	Power supply, 6000 V, 100 mA, 300 W	
ESEQ1200-SYS	Sequencing unit 20x50 cm	
EIEF1100-SYS	Isoelectric focusing system, 26x26 cm	
→ Supplied with a european mains cord + USB cable		

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.

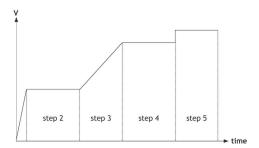
Overload protection: full protection against any overload condition including accidental short circuit of the output.

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	0300 V	0600 V	01200 V
CURRENT	02000 mA	01000 mA	0500 mA
POWER	0300 W	0300 W	0300 W
PARAMETER RANGE	1100% of full scale	1100% of full scale	1100% of full scale
TIMER	099:59 h	099:59 h	099:59 h
VOLT-HOURS	099.99 kVh	099.99 kVh	099.99 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	160 seconds	160 seconds	160 seconds
USB INTERFACE	✓	✓	✓
AMBIENT TEMPERATURE	040°C	040°C	040°C
RELATIVE HUMIDITY	095%, non condensing	095%, non condensing	095%, non condensing
POWER REQUIREMENTS	POWER REQUIREMENTS 210250 VAC, 50/60 Hz, 360 W 100125 VAC, 50/60 Hz, 360 W		210250 VAC, 50/60 Hz, 360 W 100125 VAC, 50/60 Hz, 360 W
DIMENSIONS (WxDxH)	31x26x13 cm	31x26x13 cm	31x26x13 cm
WEIGHT	10 kg	10 kg	10 kg

Power 30**0 W** 

3000 V to 6000V (2 versions) Voltage Current 100 mA to 200mA (2 versions)

**Outputs Operating Modes** 

Simple Mode

9x9 Method Programming Mode

Voltage Ramp mode Timer Mode (time or Vh)

**USB** interface **Datalogging Real Time Clock Mutiple safety features** 

Warranty

Made in Belgium

36 months



#### 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, 200mA): a high voltage power supply in a small form factor suitable for most high voltage applications EV3620 (6000V, 100mA): 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.

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.

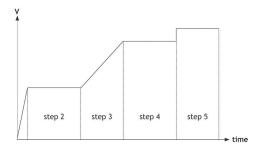
Overload protection: full protection against any overload condition including accidental short circuit of the output.

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

	E)/2222	F\/0000
	EV3330	EV3620
VOLTAGE	03000 V	06000 V
CURRENT	0200 mA	0100 mA
POWER	0300 W	0300 W
PARAMETER RANGE	1100% of full scale	1100% of full scale
TIMER	099:59 h	099:59 h
VOLT-HOURS	099.99 kVh	099.99 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
NO LOAD DETECTION	✓	✓
GROUND LEAKAGE DETECTION	✓	✓
OVERLOAD DETECTION	✓	✓
COMPUTER CONTROL	✓	✓
PASSWORD PROTECTION	✓	✓
DATA-LOGGING	3600 values	3600 values
INTERVAL	160 seconds	160 seconds
USB INTERFACE	✓	✓
AMBIENT TEMPERATURE	040°C	040°C
RELATIVE HUMIDITY	095%, non condensing	095%, non condensing
POWER REQUIREMENTS	210250 VAC, 50/60 Hz, 360 W	210250 VAC, 50/60 Hz, 360 W
	100125 VAC, 50/60 Hz, 360 W	100125 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)