Power 30**0 W** 

3000 V to 6000V (2 versions) Voltage Current 150 mA to 300mA (2 versions)

**Outputs Operating Modes** 

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 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:

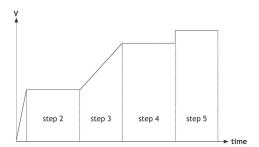
Ground leakage detection: protection from potential shock hazard when a ground leakage path is detected.

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.



## Specifications

|                          | EV3330   | EV3620   |  |  |
|--------------------------|--|--|--|--|
| VOLTAGE                  | 03000 V  | 06000 V  |  |  |
| CURRENT                  | 0300 mA  | 0150 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   |  |  |
| IEF MODE                 | ✓  | ✓  |  |  |
| 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<br>100125 VAC, 50/60 Hz, 360 W | 210250 VAC, 50/60 Hz, 360 W<br>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)