

**KNOBBS AND / OR REMOTE CONTROL D.C. LINEAR POWER SUPPLIES**

This is our newest MCU controlled power supplies serie with function keys for data set up and LCD. These power supplies are designed to operate in heavy working conditions with professional components and have been tested with severe procedures.

**FEATURES**

- Mains connection 230 Vac +/- 10%, 50-60 Hz (400Vca for mod. BVR3000 and BVR4000, others on request).
- Reduced thermal dissipation in: BV and BVD serie with electronic switch on transformer, BVR serie with electronic preregulation.
- 10 rounds knobs for Voltage and Current regulation, from zero to nominal value.
- Operating as Constant Voltage or Constant Current generator with automatic change.
- Enable / Disable output power supplies with knobs or remote contact on rear panel connector.
- Remote sense for compensation of the power cable voltage fall (max. 1V), only in  $\leq 100$  Volt models.
- 2 strings back-light LCD (20 digits 6x9,66mm size) that shows:
  - ✓ Device identification and technicals infos, etc.
  - ✓ Voltage-Current setpoint , actual values, Watt power value and internal temperature.
  - ✓ Status device: “Disable”, “Enable CV”, “Enable CC”, “Unregul”, “Over Temperature”, “Over Volt”, “Over Current”, etc.
  - ✓ Enabled special functions symbols.
- Front panel keys functions:
  - ✓ ON (NEXT) ON - Enable output power supply (pressed for 5 s for keys lock).  
NEXT - Go to next Menu line (if it is in Menu).
  - ✓ OFF (EXIT) OFF - Disable output power supply (pressed for 5 s for keys unlock).  
EXIT - Exit from Menu (if it is in Menu).
  - ✓ MENU (CHANGE) MENU - Enters in Menu.  
CHANGE - Enable or Disable options.

**TECHNICAL SPECIFICATIONS**

- LINE REGULATION:** ~ 0,001% for  $\pm 10\%$  line change.
- LOAD REGULATION:** ~ 0,01% for 100% load change.
- RIPPLE CV MODE:** ~ 0,001% Vrms of range value (+ 0,2 mV for mod. BVR).
- RIPPLE CC MODE:** ~ 0,005% Arms of range value (+ 0,5 mA for mod. BVR).
- VOLTAGE-CURRENT RESOLUTION:** 16 bit with RS232+USB.
- TRANSIENTS RESPONSE TIME:** ~ 50 uS within 1% Vout, for 20-80%load change.
- SLEW RATE:** ~ 2-8 mS.
- THERMAL STABILITY CV MODE:**  $\pm 50$  ppm for 8h after 30' warm-up.
- THERMAL STABILITY CC MODE:**  $\pm 100$  ppm for 8h after 30' warm-up.
- TEMPERATURE COEFFICIENT:**  $\pm 0,01\%$  /  $^{\circ}\text{C}$ .
- OPERATING TEMPER. RANGE:** 0 - 40  $^{\circ}\text{C}$ .
- LINE PROTECTION:** With fuse and input filter.
- OVERLOAD PROTECTION:** Programmed current limitation.
- THERMAL PROTECTION:** Electronic thermostat.
- COOLING:** Thermoregulated fan cooling ventilation.
- OUTPUT:** Floating and insulated 500 Vdc.



Different voltage and current models on request.

Power supply identifier is composed with serie's name, identifier's interface if you need (“A” for analog interface or “RU” for RS232+USB interface) and Volt-Ampere. Ex.: BV340A 30V10A is 30V 10A power supply with analog interface.

## Standard models

| SERIE   | VOLT - AMPERE |          |            |            |            |            |             |             |             |             | (L x H x P)<br>mm | Kg |
|---|---------------|----------|------------|------------|------------|------------|-------------|-------------|-------------|-------------|-------------------|----|
| <b>Single output models - 19" 3U rack mounting optional kit</b>           |               |          |            |            |            |            |             |             |             |             |                   |    |
| <b>BV140</b>  | 6V 10A        | 15V 6A   | 20V 4.5A   | 30V 3A     | 40V 2.3A   | 60V 1.5A   | 100V 0.9A   | 150V 0.6A   | 200V 0.5A   | 300V 0.3A   | 266x132x250       | 9  |
| <b>BV170</b>  | 6V 20A        | 15V 12A  | 20V 9A     | 30V 6A     | 40V 4.5A   | 60V 3A     | 100V 1.8A   | 150V 1.2A   | 200V 1A     | 300V 0.6A   | 266x132x360       | 11 |
| <b>BV340</b>  | 6V 30A        | 15V 20A  | 20V 15A    | 30V 10A    | 40V 7.5A   | 60V 5A     | 100V 3A     | 150V 2A     | 200V 1.5A   | 300V 1A     | 411x132x360       | 15 |
| <b>BV440</b>  | 6V 40A        | 15V 30A  | 20V 22A    | 30V 15A    | 40V 11A    | 60V 7.5A   | 100V 4.5A   | 150V 3A     | 200V 2A     | 300V 1.5A   | 411x132x360       | 18 |
| <b>Two independent outputs models - 19" 3U rack mounting optional kit</b> |               |          |            |            |            |            |             |             |             |             |                   |    |
| <b>BVD350</b>   | 2x6V15A       | 2x15V10A | 2x20V 7.5A | 2x30V 5A   | 2x40V 4A   | 2x60V 2.5A | 2x100V 1.5A | 2x150V 1A   | 2x200V 0.8A | 2x300V 0.5A | 411x132x360       | 16 |
| <b>BVD450</b>   | 2x6V20A       | 2x15V15A | 2x20V 11A  | 2x30V 7.5A | 2x40V 5.5A | 2x60V 3.5A | 2x100V 2A   | 2x150V 1.5A | 2x200V 1A   | 2x300V 0.8A | 411x132x360       | 18 |
| <b>Single output models - 19" rack</b>                                    |               |          |            |            |            |            |             |             |             |             |                   |    |
| <b>BVR700</b>   | 6V 50A        | 15V 35A  | 20V 30A    | 30V 20A    | 40V 15A    | 60V 10A    | 100V 6A     | 150V 4A     | 200V 3A     | 300V 2A     | 3Ux516 prof.      | 30 |
| <b>BVR1200</b>  | 6V 60A        | 15V 50A  | 20V 45A    | 30V 30A    | 40V 22A    | 60V 15A    | 100V 9A     | 150V 6A     | 200V 4.5A   | 300V 3A     | 3Ux516 prof.      | 32 |
| <b>BVR1500</b>  | 6V 75A        | 15V 70A  | 20V 60A    | 30V 40A    | 40V 30A    | 60V 20A    | 100V 12A    | 150V 8A     | 200V 6A     | 300V 4A     | 4Ux516 prof.      | 38 |
| <b>BVR1800</b>  | -             | 15V 85A  | 20V 70A    | 30V 50A    | 40V 37A    | 60V 25A    | 100V 15A    | 150V 10A    | 200V 7.5A   | 300V 5A     | 4Ux516 prof.      | 42 |
| <b>BVR2000</b>  | 6V 100A       | 15V 100A | 20V 80A    | 30V 55A    | 40V 42A    | 60V 30A    | 100V 18A    | 150V 12A    | 200V 9A     | 300V 6A     | 4Ux516 prof.      | 48 |
| <b>BVR3000</b>  | 6V 150A       | 15V 130A | 20V 120A   | 30V 80A    | 40V 60A    | 60V 40A    | 100V 24A    | 150V 16A    | 200V 12A    | 300V 8A     | 6Ux516 prof.      | 56 |
| <b>BVR4000</b>  | 6V 180A       | 15V 150A | 20V 140A   | 30V 100A   | 40V 75A    | 60V 50A    | 100V 30A    | 150V 20A    | 200V 16A    | 300V 10A    | 8Ux516 prof.      | 64 |
| <b>Two independent outputs models - 19" rack</b>                          |               |          |            |            |            |            |             |             |             |             |                   |    |
| <b>BVD720</b>   | 2x6V30A       | 2x15V20A | 2x20V 15A  | 2x30V 10A  | 2x40V 7.5A | 2x60V 5A   | 2x100V 3A   | 2x150V 2A   | 2x200V 1.5A | 2x300V 1A   | 3Ux516 prof.      | 24 |

## OPTIONS AND ACCESSORY

### CODICE DESCRIPTION

#### CROWBAR OVERVOLTAGE

5V-Vmax regulable with led report.

- OV-12A** For maximum 12 Ampere power supplies.  
**OV-22A** For maximum 22 Ampere power supplies.  
**OV-45A** For maximum 45 Ampere power supplies.  
**OV-65A** For maximum 65 Ampere power supplies.  
**OV-100A** For maximum 100 Ampere power supplies.

#### DIFFERENT MAINS

- Line115** From 230 Vac to 115 Vac.  
**Line400** From 230 Vac to 400 Vac.

#### RACK KIT

- KIT3U** 19" 3U rack mounting Kit, with handles and rear outputs.

#### ANALOG REMOTE CONTROL

- I/F-14** Insulated analog interface:
- 0-10V voltage and current programming;
  - 0-10V voltage and current monitor signals;
  - Constant Voltage, Constant Current open collector signals.

#### DIGITAL REMOTE CONTROL

- I/F-RS232+USB** Insulated interface system features:
- Voltage and Current set up;
  - Identifier, Voltage, Current and Status monitor reading.
  - 16 bit +/- 3LSB resolution;
  - 9,6 – 19,2 – 38,4 – 115,2 Kbps (USB only 115,2 Kbps) settable baud rate;
  - 5 bytes ASCII, included CRC, protocol commands.

#### RS232+USB software includes:

- Features and communication protocol user guide;
- Control Panel application;
- ActiveX application, using with Microsoft © and National Instruments (LabView ©).

**Free demo on request.**

