

ES SERIES

BENCH-TOP HIGH VOLTAGE POWER SUPPLIES

Compact bench-top high voltage power supplies for scientific and industrial systems. Sixty standard voltage/power combinations cover 5 to 100 kV and 5 to 60 W, with fixed or reversible polarity and application-specific controls.



5-100 kV

OUTPUT RANGE

5-60 W

POWER OPTIONS

90-240 VAC

UNIVERSAL INPUT

P / N / R

OUTPUT POLARITY

KEY CAPABILITIES

- Compact, cost-effective bench-top design
- Low stored energy with arc-over and short-circuit protection
- Continuously adjustable from zero to rated output
- Digital voltage and current metering standard; analog metering optional
- Optional remote programming, monitoring, and RS-232C interface

TYPICAL APPLICATIONS

- Electrostatic precipitators
- Electrospinning
- Electrochemical processes
- Insulation testing
- Scientific and industrial laboratory systems

STANDARD MODEL GUIDE

Model	Output voltage	60 W	50 W	30 W	20 W	10 W	5 W
ES5	0-5 kV	12 mA	10 mA	6 mA	4 mA	2 mA	1 mA
ES10	0-10 kV	6 mA	5 mA	3 mA	2 mA	1 mA	500 uA
ES15	0-15 kV	4 mA	3.3 mA	2 mA	1.33 mA	600 uA	333 uA
ES20	0-20 kV	3 mA	2.5 mA	1.5 mA	1 mA	500 uA	250 uA
ES30	0-30 kV	2 mA	1.66 mA	1 mA	660 uA	350 uA	166 uA
ES40	0-40 kV	1.5 mA	1.25 mA	750 uA	500 uA	250 uA	125 uA
ES50	0-50 kV	1.2 mA	1 mA	600 uA	400 uA	200 uA	100 uA
ES60	0-60 kV	1 mA	833 uA	500 uA	330 uA	166 uA	85 uA
ES75	0-75 kV	800 uA	660 uA	400 uA	266 uA	133 uA	66 uA
ES100	0-100 kV	600 uA	500 uA	300 uA	200 uA	100 uA	50 uA

Choose a voltage and power rating from the table; available power suffixes are -5W, -10W, -20W, -30W, -50W, and -60W. Add P or N for fixed polarity or R for reversible polarity. Reversible-polarity models use the larger enclosure.



ES SERIES

BENCH-TOP HIGH VOLTAGE POWER SUPPLIES

5-100 kV | 5-60 W

HIGH VOLTAGE SOLUTIONS

ES SERIES | 02

ELECTRICAL CHARACTERISTICS

Input	90-240 VAC, 50-60 Hz
Output voltage	Continuously adjustable from zero to rated maximum
Output current	Per model and selected power level
Line regulation	0.05% for +/-10% line change
Ripple	0.1% through 20 W; 0.25% for 30-60 W
Control	Front-panel 10-turn potentiometer
Metering	Two digital panel meters standard: output voltage and output current

INTEGRATION AND CONTROL

- Front-panel 10-turn voltage control
- Two digital panel meters are standard: voltage and current
- Analog-meter configurations are optional
- Ground-referenced programming and monitoring
- Dual-output and R reversible-polarity configurations available

PHYSICAL AND ENVIRONMENTAL

Output cable	Mating cable supplied
Termination	Alden-type polyethylene through 40 kV; coaxial above 40 kV
Enclosure	P/N fixed polarity: nominal 5 x 8 x 10 in; R reversible polarity: nominal 5 x 14 x 10 in
Weight	Up to 15 lb, depending on voltage, power, polarity, and selected options
Polarity	P positive, N negative, or R reversible; dual-output versions also available
Construction	Portable bench-top enclosure

OPTIONS

- Output Voltage Monitor (VM)
- Dual Analog Meters (DAM)
- Overload Trip (OL)
- RS232C Interface (RS232C)
- External Program (PRG)

MODEL NUMBER FORMAT

ES[Voltage][Polarity]-[Power]

EXAMPLE

ES30N-5W 30 kV | Negative | 5 W

P = positive N = negative R = reversible

HIGH VOLTAGE SOLUTIONS

©2026 Gamma High Voltage Research | ES Series Data Sheet | Rev A

Get in touch

+1 386-677-7070

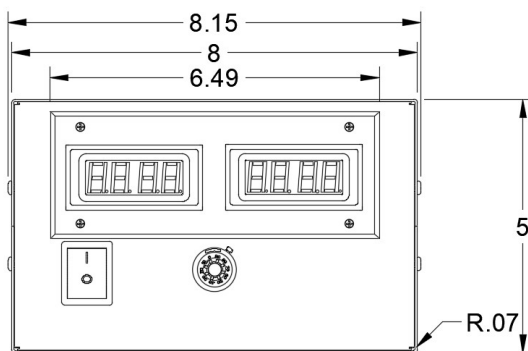
gammahv.com

1096 N US Highway 1, Suite 109 | Ormond Beach, FL 32174

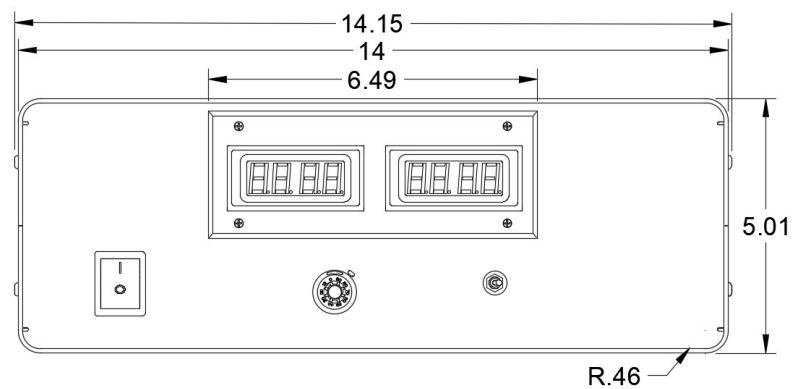
MECHANICAL DRAWINGS

Mechanical dimensions for the standard enclosures are shown below. Dimensions are in inches unless otherwise noted. Contact Gamma for assistance selecting the enclosure and connector arrangement for your configuration. The larger enclosure shown at right is the reversible-polarity (R) version.

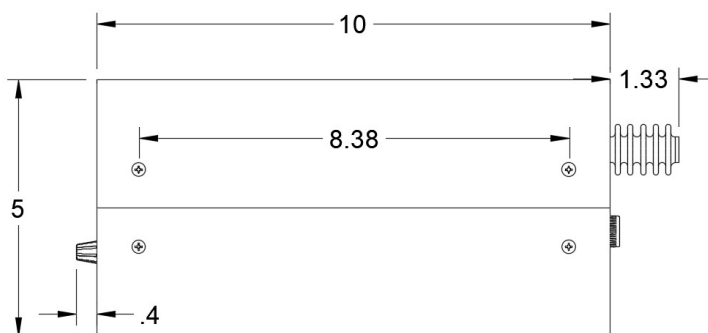
P/N FIXED-POLARITY ENCLOSURE - FRONT VIEW



R REVERSIBLE-POLARITY ENCLOSURE - FRONT VIEW



P/N FIXED-POLARITY ENCLOSURE - SIDE VIEW



R REVERSIBLE-POLARITY ENCLOSURE - SIDE VIEW

