

# Applications & Options

ES150 / 300 Series

# EST150 Series

150 W, TRIPLE OUTPUT DC POWER SUPPLIES

### Typical Applications

- Test and Measurement
- Component device testing
- Medical research equipment
- Controlled battery charging
- ATE in industrial production lines
- Accurate current sources
- Electronic Circuit Development
- Laboratory analysis

### Available Options (Not for EST150)



**Increased Output Power**  
The conservatively rated unit allows to deliver extra output power with the same reliability.

At some derating, either the maximum output voltage or the maximum output current can be increased by about 10%.



**High Voltage Isolation**  
A higher output isolation allows series operation up to 1000 V.



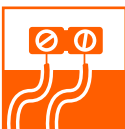
**Secured Voltage and Current Setting**  
For maximum security, the CV / CC settings can be adjusted with a screwdriver only and are protected with a plastic cap from accidental adjusting.

Only available for the ES 150 series



**Sequencer**  
Arbitrary Waveform generator or stand-alone automation. The sequencer is integrated in the Ethernet controller.

More information about this:  
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**Rear Power Output and Remote Sensing**  
Output terminals at the rear panel instead of bind posts at the front panel, includes remote sensing.



**Software Control and Interfaces**  
Factory installed programming interfaces:

- Ethernet controller
- PROFIBUS controller
- CANBUS controller
- RS232 controller

External programming interface modules:

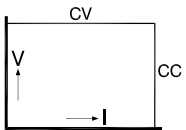
- IEEE488 controller module
- ISO AMP module

Details about interfaces:  
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**19" Rack Mounting Adapter**  
Using the 19" mounting adapters, it is possible to position the ES units in a 19" rack.

Several configurations possible with multiple ES and / or PSC or ISO AMP modules.



### Features

- Very low output ripple and spikes
- EMC surpasses CE requirements: low emission & high immunity
- Excellent dynamic response to load changes
- Protected against all overload and short circuit conditions
- Designed for long life at full power

### Functionalities

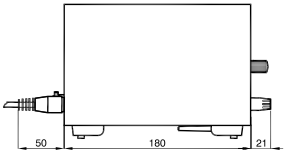
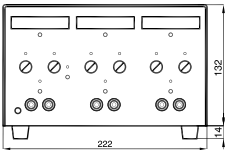
- 3 independent, floating outputs
- Dual voltage tracking or series tracking mode
- 3 output On / Off buttons
- Convection cooling
- Voltage and current control with 10 turn potentiometers



Model	Voltage range	Current range
EST 150		
Output 1	0 - 20 V	0 - 2.5 A
Output 2	0 - 20 V	0 - 2.5 A
Output 3	0 - 10 V	0 - 5 A

### Dimensions and Weight

Width = half 19"      Weight = 3,5 kg  
Height = 146 mm, incl. feet



### Specifications

- Single phase input : 90-265 V AC (48-62 Hz)
- Active Power Factor Correction (PFC) : 0.99/0.83 (at 100% load)
- Efficiency : up to 81% (at full load)
- Output ripple and spikes : from 0.5 mV<sub>rms</sub> / 8 mV<sub>pp</sub>
- Regulation : from 5 mV (0-100% load step)
- Recovery time : 100 µs (50-100% load step)
- Tracking accuracy : 0.5%
- Output voltage and current stability : 10.10<sup>-5</sup> / 10.10<sup>-5</sup>
- MTBF : 500.000 hrs
- Operating ambient temperature : -20 to +50 °C

### Standards

- Power supply standard : EN 61204-3
- Generic Emission : EN 61000-6-3 (EN55022B)
- Generic Immunity : EN 61000-6-2
- Safety : EN 60950 / EN 61010 / SELV
- Insulation input / output : 3750 V<sub>rms</sub>
- Enclosure : IP20