

EL Series - Description and Specifications

30W to 130W Linear, Single, Dual & Triple Output

- ▶ Single outputs, 30V/1A, 18V/3.3A, 56V/1.1A, 15V/5A, 30V/3A
- ▶ Single, dual or triple outputs, 30V/2A
- ▶ Independent digital voltage and current meters for each output with 3 digit resolution
- ▶ Constant voltage or constant current operation
- ▶ Variable 1.5 - 5.0V auxiliary output at 2A (EL302Tv)
- ▶ Compact design uses less bench space
- ▶ DC output switches, automatic mode indication

[Picture of several models](#) ◀



High performance at low cost

The EL series of DC bench power supplies has been designed to meet the need for a compact power supply of good performance at a reasonable price. They provides medium levels of power (up to 125 watts) with fan-free cooling for silent operation.

Linear regulation

The EL series uses all linear regulation for the best possible performance. Excellent line and load regulation is matched by very low output noise and good transient response.

Simultaneous digital metering

The EL series incorporates separate digital voltage and current meters on each main output. The meters use bright 14mm (0.56") LED displays and have an update rate of 4 per second providing near instantaneous response. Simultaneous metering of voltage and current provides accurate information "at a glance" and avoids any possibility of misinterpretation. When an output switch is set to "off", the current limit setting is displayed enabling conditions to be set before the load is connected.

Constant voltage or constant current

The main outputs can operate in constant voltage or constant current mode with automatic crossover and mode indication. Coarse and fine voltage controls are provided. The current control is logarithmic enabling low current levels to be set accurately.

Auxiliary low-voltage output

The EL302Tv incorporates a third output variable between 1.5V and 5.0V with a fixed current limit of 2A. The set voltage can be checked using the digital displays.

Single, dual or triple outputs

The EL series includes six single output models plus one dual output and one triple output model. The EL302D has two independent and isolated outputs each with a 0 to 30V, 0 to 2A capability and its own on-off switch. The outputs can be wired in either series or parallel to provide voltages up to 60 volts or currents up to 4 amps. All outputs are intrinsically short circuit proof, and are protected against external voltages and reverse currents.

EL series - range		
Single Output		
EL301	30V/1A	30 watts
EL183	18V/3.3A	60 watts
EL302	30V/2A	60 watts
EL561	56V/1.1A	60 watts
EL155	15V/5A	75 watts
EL303	30V/3A	90 watts
Dual Output		
EL302D	2 x 30V/2A	120 watts
Triple Output		
EL302Tv	2 x 30V/2A + 5V/2A	130 watts

▶ A Bus Programmable version, the EL302P, is also available.

SPECIFICATIONS

MAIN OUTPUTS

Operating Mode	Constant voltage or constant current with automatic cross-over and indication.
Voltage Setting	0V to >rated O/P by coarse and fine controls.
Current Setting	0A to >rated O/P by single logarithmic control.
Load regulation	<0.01% of max. O/P for a 90% load change.
Line regulation	<0.01% of max. O/P for a 10% line voltage change.
Output impedance	Typically <5mW in constant voltage mode. Typically >50kW in constant current mode.
Ripple & Noise (20MHz bandwidth)	Typically <1mV rms.
Transient Response	<20µs to within 50mV of set level for 90% load change.
Temp. Coefficient	Typically <100ppm/°C.
Output Protection	Outputs will withstand forward voltages above the rated output voltage. Reverse protection by diode clamp for currents up to 3A.
Status Indication	Output ON lamps. Constant current lamps.
Output Switch	Electronic. Preset voltage and current displayed when output is off.
Output Terminals	4mm terminals on 19mm (0.75") pitch .

METERS (main outputs)

Meter Types	Separate 3 digit meters for voltage & current with 14mm (0.56") LED displays. Reading rate 4/sec.
Meter Resolutions	100mV, 10mA.
Meter Accuracies	Voltage 0.3% ±1 digit. Current 0.6% ±1 digit.

AUXILIARY LOW VOLTAGE OUTPUT (EL302Tv)

Voltage	Variable <1.5V to >5V by front panel control.
Meter Voltage accuracy	±0.3% ±1 digit
Current limit	2A minimum.
Load regulation	<3% for 90% load change.
Line regulation	<0.2% for 10% line voltage change.
Ripple & Noise (20MHz bandwidth)	Typically <5mVrms, <15mVpk-pk (CV mode).
Output Protection	Output will withstand up to 7V forward voltage. Diode clamp reverse protection for currents up to 3A.
Output Terminals	4mm terminals on 19mm (0.75") pitch .
Status Indication	UNREG lamp.

POWER

AC Input	230V or 115V ±10% AC, 50/60Hz, Installation Category II.
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SIZE AND WEIGHT

Size	140 x 160 x 320mm (single); 260 x 160 x 320mm (dual/triple)
Weight	3.4 to 7.5 kg.

ENVIRONMENTAL

Operating Range	+5°C to +40°C, 20% to 80% RH.
Storage Range	-40°C to + 70°C.
Environmental	Indoor use at <2000m, Pollution Degree 1.
Safety	Complies with EN61010-1.
EMC	Complies with EN61326.