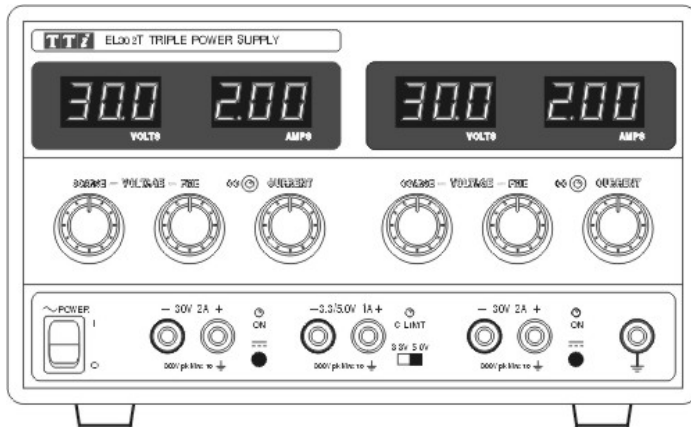


## EL series Compact bench DC power supplies



- Single, dual & triple output models from 30W to over 125W
- Digital voltage and current meters for each main output
- Highly compact design, excellent price/performance ratio

### 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.

### 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.

### 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.

### Ready for low-voltage logic

To reflect the increasing usage of low-voltage logic devices, the third output of the EL302T can be switched between 5 volts and 3.3 volts.

### Safety and reliability

The EL series has been designed to meet the stringent requirements of relevant IEC standards for safety and EMC.

EL series - range		
<b>Single Output</b>		
EL301	30V/1A	30 watts
EL183	18V/3.3A	60 watts
EL302	30V/2A	60 watts
EL561	56V/1.1A	60 watts
<b>Dual Output</b>		
EL302D	2 x 30V/2A	120 watts
<b>Triple Output</b>		
EL302T	2 x 30V/2A + 5V/1A	125 watts

Note: This is a faxable data sheet, a colour brochure 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 <5mΩ in constant voltage mode. Typically >50kΩ in constant current mode.
- Ripple & Noise (20MHz bandwidth): Typically <1mV rms (CV mode).
- 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. 100mV, 10mA.
- Meter Resolutions: Voltage 0.3% ±1 digit. Current 0.6% ±1 digit.

### LOGIC OUTPUT (EL302T)

- Voltage: 5V or 3.3V, selectable by front panel switch.
- Voltage accuracy: ±3%
- Current limit: 1A minimum.
- Load regulation: <0.5% for a 90% load change.
- Line regulation: <0.1% for a 10% line voltage change.
- Ripple & Noise (20MHz bandwidth): Typically <1mV rms.
- Output Protection: Output will withstand forward voltages above the rated output. Diode clamp reverse protection for currents to 3A.
- Output Terminals: 4mm terminals on 19mm (0.75") pitch .
- Status Indication: Current limit lamp.

### POWER

- AC Input: 230V or 115V ±10% AC, 50/60Hz. Installation Category II.

### 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.

Thurlby Thandar Instruments Ltd. operates a policy of continuous development and reserves the right to alter specifications without prior notice.

Designed and built in the EEC by:



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