

## DL 2155RTD TRANSISTOR BASED VOLTAGE REGULATORS

The board analyzes the components normally used in cascade to transformer and filter to realize stabilized power supply units with bipolar technology. For all configurations the input and output characteristics can be measured. The board is arranged in 4 modules that allow the study of:

- Zener voltage regulator
- Zener voltage regulator with series and parallel transistor
- Voltage regulator with variable output
- Voltage regulator with short-circuit protection and Darlington transistor

The board is supplied complete with a set of stackable, plug-in cables of suitable lengths and colours and with a training manual.

Power supply: + 15 V, 750 mA

Examples of performable exercises

- Study of voltage regulators with fixed or adjustable output voltage
- Study of different regulators with increasing performances
- Measurement of the typical regulator parameters: input and output characteristics, output resistance, ripple

### Accessories and Instrumentation

- DL 2555AL or DL 2155PCS  
Power supply
- Universal multimeter (2 off)

## DL 2155OSA HIGH FREQUENCY OSCILLATORS

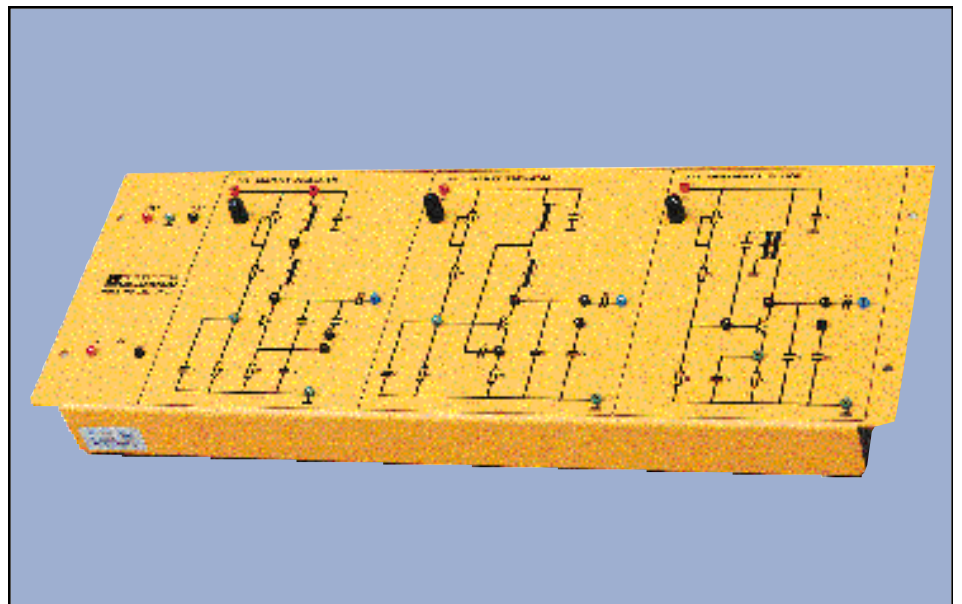
The board allows the study and the successive experimental verification of the most widespread circuit configurations for high frequency sinusoidal oscillators.

The panel includes the Colpitts, Hartley and Meissner oscillators carried out with discrete components that are usually used as radiofrequency signal generators, i.e. for frequencies between 100 kHz and 1 GHz.

The three analysed configurations could be also operated outside the above mentioned limits but their use is limited from the size and the values of the reactive components that should be used as resonant elements.

The board is supplied complete with a set of stackable, plug-in cables of suitable lengths and colours and with a training manual.

Power supply: + 15 V, 100 mA



Examples of performable exercises

- Operation of sinusoidal oscillators of Hartley, Colpitts, Meissner type
- Recording of the typical parameters such as oscillation frequency and trigger current

### Accessories and Instrumentation

- DL 2555AL or DL 2155PCS  
Power supply
- Universal multimeter
- Dual trace oscilloscope
- Frequency counter