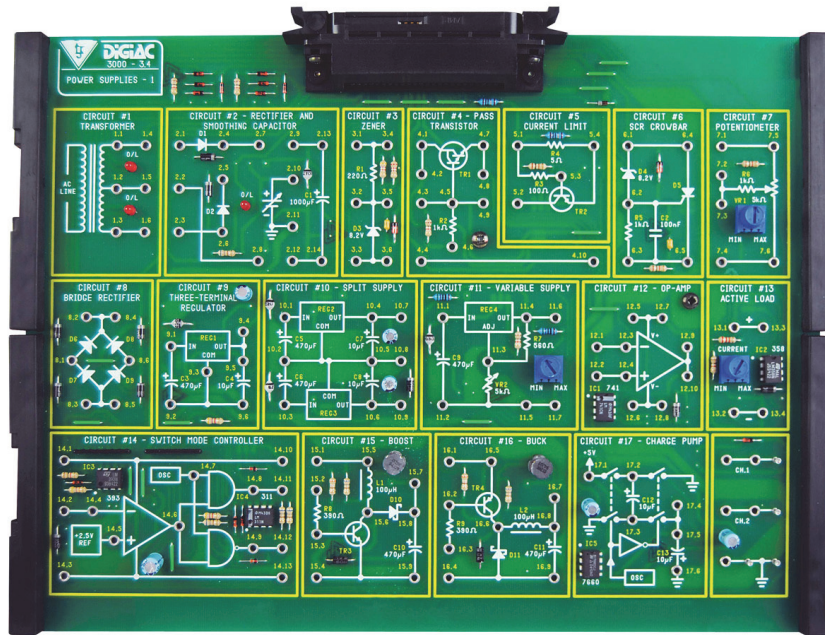


# Product Information Sheet

## Power Supplies Study Module



LJ CREATE™  
Learning for life



This electronics study module is designed to connect to the Advanced Electronics Experiment Platform (300-01) as part of a modular electronics programme.

The study module is designed to introduce students to the circuits and devices used in power supplies through a wide range of practical activities.

Using the Advanced Electronics Experiment Platform, a range of faults to be selected and inserted into the study module circuits to develop electronic diagnostic and faultfinding techniques.

The study module is supplied with PDF manuals that provide theory materials, practical tasks, faultfinding activities, and technical information.

### Topics Include the Following:

- Rectification
- Stabilization and Smoothing
- Protection
- Variable Output Voltage
- Fault Diagnosis
- IC Power Supplies-1
- IC Power Supplies-2
- Switch-Mode Supply

### Typical Activities Include:

- Compare the operation of simple half-wave and full-wave rectifier circuits
- Determine the output resistance, ripple amplitude, and percentage ripple of a power supply
- Determine by investigation the operation of a zener/transistor stabilizer circuit
- Determine by investigation the operation of a power supply with over-current protection
- Determine by investigation the operation of a power supply with over-voltage protection
- Determine by examination the circuit operation of a variable voltage power supply
- Diagnose faults in a variable voltage, over-current protected power supply circuit
- Measure the % regulation of a dual-polarity, split power supply

- Measure the percentage regulation of a dual-polarity, split power supply
- Determine, through measurements, the efficiency and regulation of a variable supply regulator
- Determine by investigation the operation of a switch mode power supply
- Faultfinding power supply circuits

### Items Included:

- Circuit Card
- Storage Case
- Curriculum Manual in PDF Format

### Other Items Required:

- 300-01 Advanced Electronics Experiment Platform
- Digital Multimeter
- Dual Trace Oscilloscope
- Signal Generator

### General Information:

Dimensions: 81 x 323 x 256 mm (W, H, D)  
Shipping Volume: Approx 0.008 m<sup>3</sup>  
Shipping Weight: Approx 2 kg

**Order Code: 303-34**

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For more information visit [www.ljcreate.com](http://www.ljcreate.com)