



Nvis 6509C Understanding Network Theorems is a compact, ready to use experiment board and has been designed specifically for the study and verification of network theorems in DC circuits. In network analysis, the fundamental rules are ohm's law and Kirchhoff's laws. These laws may be applied to analyze any circuit configuration but for solving complex circuits, use of "Network theorems" is much better because it simplifies the analysis of complicated circuits.

It is a useful product for students to study and verify Norton's, Thevenin's, Maximum Power Transfer, Superposition, Reciprocity and Tellegen's Theorems. This product explains corresponding theorems in very easy way, Tellegen's theorem is explained in individual block and Norton's, Thevenin's and Maximum Power Transfer Theorems are explained in a single circuit so that student can compare these theorems with each other. Superposition and Reciprocity theorems are also explained in a single circuit. The product is designed and presented in such a way that student can easily measure all the electrical parameters like voltage, current and resistance.

### Features

- Exclusive and compact design
- In-built power supply
- Constant current source
- On board Voltmeter & Ammeter
- Straight forward representation of all theorems
- On board equivalent circuits
- Potentiometer is provided to vary load resistance

### Technical Specifications

Mains power supply	: 90 - 270V $\pm 10\%$ , 50Hz
DC power supply	: +5V, Regulated +12V, Regulated
Constant Current Source	: 3.2 mA
Voltmeter Range	: 200mV to 20V
Ammeter Range	: 200 $\mu$ A to 200mA
Dimensions (mm)	: W 350 x D 280 x H 55
Optional	
Multimeter Sciencetech '50/51'	

### Scope of Learning

- Study and verification of Norton's theorem
- Study and verification of Thevenin's Theorem
- Study and verification of Maximum Power Transfer Theorem
- Study and verification of Superposition theorem
- Study and verification of Reciprocity theorem
- Study and verification of Tellegen's Theorem