

**OMEGA TYPE 20 011** Transmission Line is the key learning concept for Electrical Engineers. Transmission Line Training System is exclusively designed to deliver the learning aspects of the electrical transmission line. Digital display is provided for easy measurement of Voltage, Current Frequency. These parameters help students to learn the characteristics of transmission line and calculations of the ABCD, H, Z parameters. Students can perform various experiments like short, medium and long transmission line and their behavior. Also one of the important experiment which can be performed with this training system is Ferranti Effect.

### OBJECT

- 01 To study Short Circuit, Medium, Long Transmission Line
- 02 Determine the ABCD, H, Z and Image parameters of Short Transmission Line
- 03 Determine the ABCD, H, Z and Image parameters of Medium Transmission Line For T network  
For  $\pi$  network
- 04 Determine the ABCD, H, Z and Image parameters for Long Transmission Line
- 05 Measure the receiving end voltage of each line under no load or lightly load condition to understand Ferranti effect
- 06 Understand the performance of transmission line under different loads with varies resistive Inductive and Capacitive load in Different steps.

### FEATURES

- 01 VIF Meter for Measurement of voltage, current and Frequency.
- 02 Simultaneous display of sending and receiving parameters
- 03 Highly sensitive to change in reading for better controlling
- 04 High Resolution for accurate measurement
- 05 Inbuilt Single Phase Variac to regulate supply
- 06 Equipped with fixed R, L & C Load
- 07 Facility to configure Short, Medium & Long Transmission Line using multiple value of R, L & C
- 08 Designed by considering all the safety standards
- 09 Diagrammatic representation for the ease of connections



### TECHNICAL SPECIFICATION

**01 Mains Supply:** 230V  $\pm$ 10%, 50Hz

**02 Single Phase Variac**

Input : 230V  
Output : 0-270V  
Current : 0-2A

**03 LCD/LED Display Measurement Two Numbers**

Voltage : 30-600V  
Current : 0-5A  
Frequency : 40-60Hz.

**04 Loads**

Resistor : 700 $\Omega$ / 100W  
Inductor : 800mH/ 0. 5A  
Capacitor : 12.5 $\mu$ F/ 450V  
Dimension : L800 x H600 x D350(mm)  
Weight : 52kg (approximate)

### LIST OF ACCESSORIES:

- 01 Shrouded Patch Cord 4mm Length 50cm Red 12
- 02 Shrouded Patch Cord 4mm Length 50cm Blk....12
- 03 Shrouded Patch Cord 4mm Length 100cm Red 12
- 04 Shrouded Patch Cord 4mm Length 100cm Blk.. 12

We are committed to the continuous development of our products, and therefore reserve the right to amend specifications without prior notice.

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