



Transformer Study System (With PC Interface)

Single Phase Transformer Lab

Nvis 7004



Nvis 7004 Single Phase Transformer Lab is an elite training system for the Electrical laboratories. The product helps you to get fully acquainted with the basic concepts and functioning of a Single Phase Transformer.

The product is represented in such an easy way that each test can be studied differently in proper sequence. The Lab practically expertise you in exercises like Polarity, Turns Ratio, Transformation Ratio, Iron Loss, Copper Loss, Efficiency etc. The vast scope of learning makes the subject easily and completely understandable.

Features

- Inbuilt Single Phase Variac
- Equipped with Supply Indication Lamp
- Facility to use Fixed and Variable Load
- Control board consist of high grade FRP material to provide utmost safety to the users
- Terminals provided to use the optional externally
- Designed by considering all the safety standards
- Diagrammatic representation for the ease of connections
- Flexibility to configure Step-up, Step-down and Isolation Transformer
- Exclusive and Compact Design
- Product Tutorial (CD)

Scope of Learning

- Study of Transformation Ratio in a Single Phase Transformer
- Study of Polarity Test in a Single Phase Transformer
- Study of Open Circuit Test in a Single Phase Transformer
- Study of Short Circuit Test in a Single Phase Transformer
- Study of Load Test and correspondingly determine the Efficiency and Voltage Regulation in a Single Phase Transformer

Technical Specifications

Mains Supply : Single Phase, 230V AC $\pm 10\%$, 50Hz

Single Phase Transformer

Rating : 1kVA
Primary Voltage : 0-125V, 0-125V
Secondary Voltage : 0-125V, 0-125V
Rated Current : 4A

Single Phase Auto Transformer

Primary Voltage : 230V
Secondary Voltage : 0-270V
Rated Current : 5A

Digital Meters Used

AC Voltmeter : 450V (2nos.)
AC Ammeter : 5A (2nos.)
Wattmeter : 1500W

MCB (SP) : 6A

Optional

Resistive Load "Nvis 726"





Electrical Data Acquisition System

Nvis 7070A

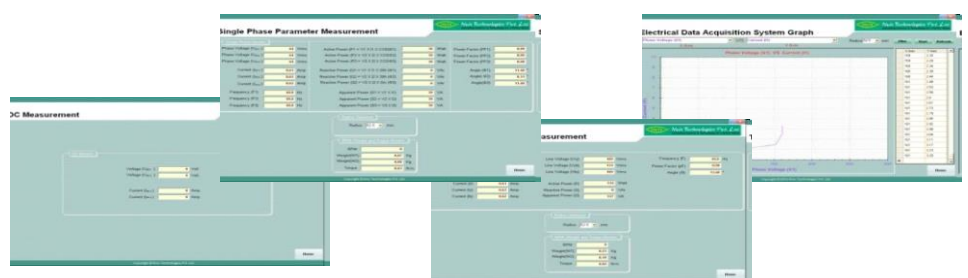
Nvis Electrical Data Acquisition System is a versatile solution that allows high quality measurements for all Electrical Parameters and is suited for all types of Engineering Laboratories. Electrical Data Acquisition System provides wireless measurements of Single and Three Phase AC as well as DC Parameters measurements with high accuracy.

Nvis Electrical Data Acquisition System includes three inputs each for Voltage and Current, two inputs each for DC Voltage and DC Current to measure an entire Three Phase Parameters and DC Parameters such as AC and DC Voltage, AC and DC Current, Active Power, Reactive Power, Apparent Power, Power Factor, Frequency, etc. along with Over Load Protection Indicators and buzzer at the same time. All these parameters will be displayed on the PC Software screen provided with the product.

Nvis Electrical Data Acquisition System is compatible for three phase/three wire and three phase/four wire configurations. User can also plot a real time graph between any of these parameters on computer through the facility of wireless connectivity.

Features

- Electrical Data Acquisition System is compatible for Motors up to 3HP
 - Real Time monitoring of electrical parameters using computer Interface Software
 - Curve can be plotted between any of the two electrical parameters along with its calculation done on computer
 - Facility to store plotting curve reading for further reference
 - Microcontroller based accurate and reliable design
 - Single Phase Parameters Measurement
 - 3 AC Voltage Inputs
 - 3 AC Current Inputs
 - Three Phase Parameters Measurement
 - Line to Neutral Voltage
 - Line to Line Voltage
 - Line Current
 - Active Power
 - Reactive Power
 - Apparent Power
 - Frequency
 - Power Factor
 - CT is used as Current Transducer
 - Fully isolated measurement
- Corresponding Active Power, Reactive Power, Apparent Power, Frequency, Power Factor and Angle
- 2 DC voltage Inputs



Real Time monitoring of electrical parameters using computer interface software



Electrical Data Acquisition System

Nvis 7070A

Technical Specifications

Communication Frequency : 2.4 GHz

RF Power : 1mWatt

Range : 10 Mtr.

Measurement Ranges

AC Voltage Range : 25-450Vrms, accuracy $\pm 1\%$

AC Current Range : 0.20-10Amp, accuracy $\pm 1\%$

DC Voltage Range : 25-300Vrms, accuracy $\pm 1\%$

DC Current Range : 0.20-15Amp, accuracy $\pm 1\%$

Frequency : 45-55Hz, accuracy $\pm 0.5\text{Hz}$

Active Power : 50-3000Watts, accuracy $\pm 2\%$

Reactive Power : 50-3000Watts, accuracy $\pm 2\%$

Apparent Power : 50-3000Watts, accuracy $\pm 2\%$

Power Factor : 0.30 to 0.99 both Lead and Lag, accuracy $\pm 3^\circ$ Electrical

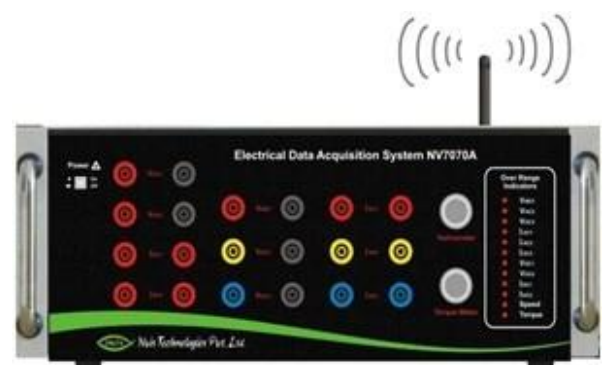
Speed : Up to 2500 RPM

Torque : 0 - 25 N-m

Auxiliary Supply : 230V AC $\pm 10\%$, 50Hz



Wireless connectivity with computer



Speed Measurement Device

Designed and Manufactured in India by -

Nvis Technologies Pvt. Ltd.

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