



Power Measurement using CT & PT

Nvis 7057



Nvis 7057 Power Measurement using CT & PT setup is designed to explore the measurement techniques used in electrical meters for measurement of Voltage, Current, Power etc. Current Transformer (CT) and Potential Transformer (PT) are used to sense Current and Voltage respectively from a transmission line. The various parameters that affect the Current and Voltage sensing using CT and PT are primary and secondary winding turns, gauge of wire and type of core. Nvis 7057 provides in-depth explanation and experimental analysis of various configurations of Current and Voltage measurement using CT and PT.

The students can measure the Voltage, Current, Wattage and Power Factor. Digital Voltmeter, Ammeter and Wattmeter are provided on panel to increase accuracy of measurement. The meters have very high accuracy and resolution.

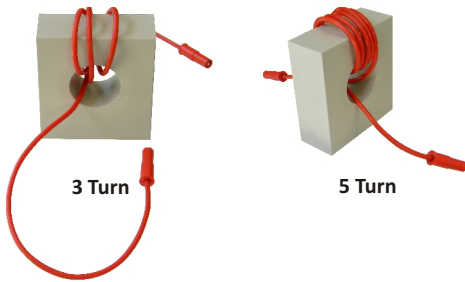
The CT is provided on panel so that students can change the turns in primary winding and measure the corresponding changes in secondary winding and change in measurement. Protection circuit is inbuilt.

Features

- Inbuilt single phase current and voltage source
- Inbuilt Current Transformer (CT) & Potential Transformer (PT)
- CT can be configured for various turns ratio
- Digital meters for accurate result and analysis
- Designed by considering all the safety standards
- Diagrammatic representation for the ease of connections
- Exclusive and Attractive Design: Last
- Online product tutorial

Scope of Learning

- Study of measure high value of AC Current by a low range AC Ammeter and Current Transformer
- Study of measure high value of AC Voltage by a low range AC Voltmeter and Potential Transformer
- Study of Measure Power using CT & PT



Students can configure primary winding of CT to understand and analyse effect on secondary winding

Technical Specifications

Mains Supply	: 230V \pm 10%, 50Hz
Variac	
Input	: 230V AC
Output	: 0-270V AC
Current Rating	: 5A
Ammeter (2 nos.)	
Display Resolution	: 0.01A AC
Range Min/Max	: 0.1/5A
Voltmeter (2 nos.)	
Display Resolution	: 1V AC
Range Min/Max	: 10V/300V
Wattmeter	
Display Resolution	: 1W
Range Min/Max	: 15/1500W
Current Transformer	
CT Ratio	: 1:10
Secondary Current Rating	: 2A
Potential Transformer	
PT1	
Primary	: 230V
Secondary	: 115V
PT Ratio	: 1:2
PT2	
Primary	: 230V
Secondary	: 57.5V
PT Ratio	: 1:4
Rheostat	: 2200, 2.8A
MCB	: 2A (SPN)
Dimensions (mm)	: W 600 x D 350 x H 450
Weight	: 22kg (approximate)

