

# Electrical Data Acquisition System Nvis 7070A



**Nvis 7070A** offers three AC voltage channels, three AC current channels, two DC voltage channels, two DC current channels, speed and torque measurement through wireless. Additionally, it also provides the measurement of any 3-phase electrical system simultaneously without using individual meters. It is a compact table top unit. In this instrument we have provided a range of indicators and buzzers for AC/DC voltage, AC/DCcurrent, speed and torque parameters. It also has a light indication for running channel. It includes signal processing required to perform Voltage, Current, Frequency, Active Power, Reactive Power, Apparent Power and Power Factor measurements.

This product is suitable to measure active, reactive, and apparent energy in various 3-phase configurations. It is Compatible with 3-phase/4-wire systems. All the measured parameters are displayed on the PC software provided with this product.

### **Features**

- Singe Phase Parameters Measurement
  - 3 AC Voltage channels
  - 3 AC Current channels

Corresponding Active power, Reactive power, Apparent power, Frequency, Power factor and Angle

- 2 DC voltage channels
- 2 DC current channels
- Three Phase Parameters Measurement
  - Line to Neutral Voltage
  - Line to Line Voltage
  - Line Current
  - Active Power
  - Reactive Power
  - Apparent Power
  - Frequency
  - Power Factor

- Curve can be plotted between any two parameters
   Store curve reading for further study
- Microcontroller based Accurate & Reliable design Wireless connectivity to PC
- CT is used as current transducer
- Fully isolated measurement



**Speed Measurement Unit (Optional)** 



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## Nvis 7070A

## **Technical Specifications**

AC Voltage Range : 25-450Vrms, Accuracy ±5%

AC Current Range : 0.20-10Amp, Accuracy ±5%

DC Voltage Range : 25-300Vrms, Accuracy ±5%

DC Current Range : 0.20-10Amp, Accuracy ±5%

Frequency : 45-55Hz, Accuracy ±3%

Active power : 50-3000Watts, Accuracy ±5%

**Reactive power** : 50-3000Watts, Accuracy ±5%

**Apparent power** : 50-3000Watts, Accuracy ±5% **Power Factor** : 0.30 to 0.99 both Lead & Lag

Accuracy ±3º Electrical

Speed : Up to 2500 RPM, Accuracy ±5%

Torque : 0-25 N-m, Accuracy ±5%

Auxiliary Supply : 230V AC± 10%, 50Hz

Following products are compatible with Nvis 7070A Electrical Data Acquisition System

**Nvis 7006** Three Phase Induction Motor Trainer

Nvis 7007 DC Machine Lab I
Nvis 7008 DC Machine Lab II

**Nvis 7013** Three Phase Synchronous Motor Lab

Nvis 7014 DC Series Motor Lab

Nvis 7015 Single Phase Induction Motor Lab

**Nvis 7017** Three Phase Synchronous Generator Lab

Nvis 7021 Shunt Motor Series Generator Lab

Nvis 7023 DC Compound Motor Lab

Nvis 7027 Induction Motor Compound Generator Lab
Nvis 7031 Compound Motor Compound Generator Lab

Nvis 7033 Slip Ring Induction Motor Lab
Nvis 7034 Swinburn's Test of DC Machine



PC connectivity with module

#### **Software Windows**







Torque Measurement Unit (Optional)

