Automatic Test Equipment

*We are very much pleased to introduce the **Automatic Test Equipment (ATE)**, developed by us for testing of Electrical / Electronic products for the Large & Medium Scale Manufacturers. These kinds of instruments can test thousands of units in a very short time, fully computerized documentation, with very good accuracy and high reliability, delivering 24 hours of operation.*

Main Features of ATEs

Very First - Low cycle time

No special skill required

Human Error Free

Computerized Documentation

High Accuracy

Very High Reliability

Economic

For testing of CFL , LED, MOTOR, HF Ballast, EM Ballast, Transformer with an unskilled person.

Our ATE Clients

- Philips Electronics India Ltd.
- Electroplast India Ltd.
- Eveready Inds. India Ltd
- Orient Fans
- Marathan Electric Motors (I) Ltd.
- Fulham India Pvt. Ltd.
- NTL Electronics India Ltd.
- Delta Electronics
- PMS Flashmatics Pvt. Ltd.
- Urban Engg. Association Pvt.Ltd.
- Uma Poly Solutions Pvt. Ltd.

And many more

*Design & Development * Manufacturing * Marketing*

E x p e r i e n c e t h e E x c e l l e n c e …

Synchro Electronics

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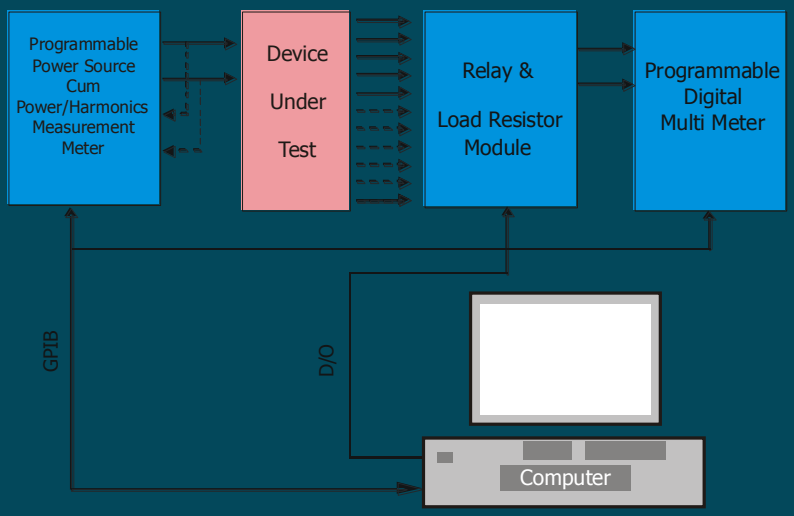
The Automatic Test Equipment (ATE) is an integrated test system to check/confirm the performance of Electronic Ballasts. This dedicated instrument is developed to ensure the quality of the products those are manufactured by your company. The following block diagram describes the basic working principle of the system.



Block Diagram ATE

The ATE, what we manufacture is confirming performance of complete parameters, viz. Input Power, PF, Current THD, Output Voltage, Output Current, Operating Frequency, efficiency, etc. for 100% products. The typical Cycle Time is less than 3Sec for CFL testing. The ATEs record all the test data against Time stamping and can also record Serial No. if that is available on the body of the sample in BAR Coding.

How to Work ATE

It can declare "Pass" when all the test result are within the limit or declare "Fail" when any of the measure parameter is out of the limit. All the test results (Pass/Fail) are recorded in a data base file with date and time stamping. The setup parameters are initially fed in the system. Test parameters are stored for different types/models. During the test a particular model is called just put it in the test jig and press the start button to initiated the test. The equipment automatically runs the test sequence as per listed parameter. The equipment can be easily incorporated in automatic conveyor system

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Automatic Test Equipment (ATE)

The major benefits of our ATE are

- 100% testing of products
- No special skill required
- Human error free
- Computerized Documentation
- Low Cycle Time
- High accuracy
- Saves Space
- Saves Q/A Manpower
- High Throughput
- General purpose instrument can test all the varieties of production items.
- Useful for long-term Quality Assurance of the 100% products.

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Parameters of LED Driver Test ATE

1. Go – No-go
2. HV – I/P to O/P & All Terminals to body up to 5KV, @5mA, 10mA, 20mA,50mA.
3. IR – I/P to O/P & All Terminals to body, @ 500VDC
4. At any I/P Voltage between 0 – 300VAC
    - I/P Power
    - I/P Voltage
    - I/P Current
    - PF
    - I – THD
    - I – Crest Factor
    - O/P – Voltage (On load and OCV)
    - O/P – Current
    - O/P – Power
    - O/P – Regulation
    - Efficiency

Parameters of LED Lumeniar Test ATE

1. Go – No-go
2. HV – I/P to O/P & All Terminals to body up to 5KV, @5mA, 10mA, 20mA,50mA.
3. IR – I/P to O/P & All Terminals to body, @ 500VDC
4. Earth Bond Resistance @ 1A
5. I/P – Voltage
6. I/P – Current
7. I/P – Power
8. PF
9. I – THD
10. I – Crest Factor
11. Leakage Current

Parameters of MCPCB Test ATE

1. Go – No-go

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2. HV - all connectors to body up to 5KV
3. IR – all connectors to body, @ 500VDC
4. Forward Voltage
5. LED Current
6. O/P – Current at Law I/P - Voltage
7. O/P - Current at High I/P – Voltage
8. O/P - Current at Normal I/P – Voltage
9. O/P – Voltage
10. O/P – Open Circuit Voltage
11. I/P - Power
12. I/P - PF
13. I – THD

Parameters of MOTOR Test ATE

1. Go – No-go
2. Coil Resistance
3. High Voltage (up to 2KV, 0 – 30mA)
4. Insulation Test at (500V DC)
5. Lock Rotor Test
6. Input Current
7. Input Voltage
8. Input Power
9. Power Factor
10. Leakage Current

Parameters of HF Ballast Test ATE

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1. Go – No-go
2. Input Power
3. Input Power Factor
4. Input Current THD
5. Filament Voltage
6. Lamp Voltage
7. Lamp Current
8. Lamp Power
9. Operating Frequency
10. Ballast Efficiency
11. Power at Shutdown Test

Parameters of CFL Ballast Test ATE

1. Go – No-go
2. Input Power
3. Input Power Factor
4. Input Current
5. Lamp Voltage
6. Operating Frequency
7. Input Current THD

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Parameters of EM Ballast Test ATE

1. Go – No-go
2. Coil Resistance
3. High Voltage (up to 2KV, 0 – 30mA)
4. Insulation Test at (500V DC)
5. Voltage set (up to 300V)
6. Current Through Ballast
7. Watt Loss Test

The major benefits of our ATE are

- 100% testing of products
- No special skill required
- Human error free
- Computerized Documentation
- Low Cycle Time
- High accuracy
- Saves Space
- Saves Q/A Manpower
- High Throughput
- General purpose instrument can test all the varieties of production items.
- Useful for long-term Quality Assurance of the 100% products.