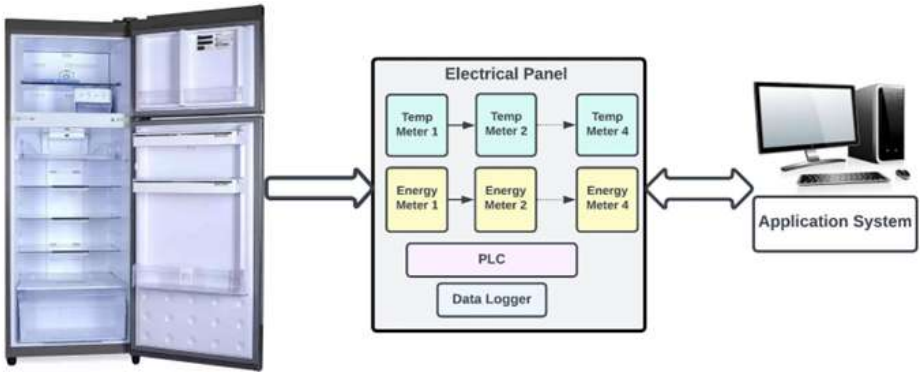
REFRIGERATOR TEST SYSTEM



Modular. Scalable. Efficient. ISO-Compliant.

Application Summary

This system is designed for comprehensive testing of domestic, commercial and medical refrigerators under diverse environmental conditions. Ideal for use in R&D labs, quality control and production lines to ensure performance, energy efficiency, and compliance with global standards.

Key Highlights

- Single-platform solution for both R&D and Production testing.
- Evaluates energy-efficient parameters in compliance with ISO/IEC 62552-1 standards.
- Highly modular and reconfigurable test system with fast deployment.
- Seamless integration with NI hardware, LabVIEW software, and advanced sensors.
- Enables data-driven decision-making with real-time performance analytics.

Tests Conducted

- Energy Consumption
- Pull-Down & Storage
- Freezing & Cooling Capacity
- Temperature Rise
- Ice Making
- High & Low Voltage Pickup
- Bottle Cooling
- Duty Cycle (temp box)
- Water Vapor & External Condensation
- Odor Testing
- Cool Down, Stable Running

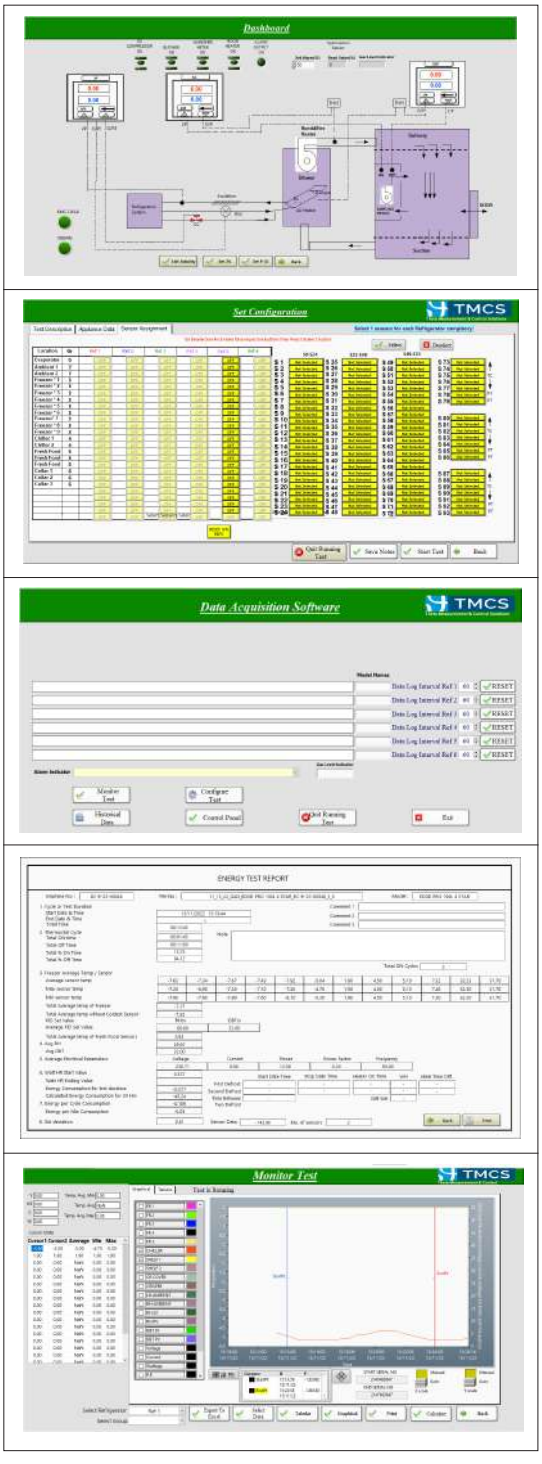
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REFRIGERATOR TEST SYSTEM

System Features

- Realtime analysis in user-defined formats.
- ISO-compliant reports for energy, cycle time & temperature.
- Integration with COLA/PP software for deep analytics.
- In-depth compartment-wise analysis.
- Automated defect identification and system validation.
- Scalable sensor setup with support for up to 150 sensors.
- Advanced data logging and analysis for predictive quality control.



Technology Used

- NI cRIO, DAQ Modules
- RTD Modules, Energy Meters
- PLC for monitoring & control
- NI LabVIEW for custom automation and reporting

Customer Benefits

- Test Speed improved by 25%
- TCR (Technical Call Rate) reduced by 15%
- Rejection Ratio reduced by 4%
- Reduced human intervention

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