Emerging Technologies

# MULTI-CONDUCTOR CABLE HIPOT & CONTINUITY TEST SYSTEM

## Application Brief

Emerging Technologies, LLC. was called upon to provide a replacement multi-conductor cable test system. An existing test system was in place and failing due to age.

The new system was designed to using modern hardware and software. A new test application was written to duplicate the existing functionality while adding some new features.

Multiple models of cables are tested based on model number. The test system looks up the test parameters for test based on operator selected part number as selected from a pull down field on the operator screen. The DUT is HiPot tested and checked for correct pinout. Results of each test are stored in a csv file.

The design package included; bill of material, mechanical diagrams, electrical diagrams, custom application specific labeling, and custom developed LabView test application software.

Customer Benefit:
The customer is able to perform automated testing of a diverse group of product via one easy to use test system. Results are stored and analyzed for yield. Cost savings were realized through greater efficiency associated with newly added test features.


### ET RESPONSIBILITIES:

- Functional Specification Generation
- ✓ Design/Engineering
- ✓ Fabrication
- ✓ Programming - Software
- Programming - Firmware
- Circuit & PCB Design
- ✓ On-Site Commissioning
- ✓ Post Commissioning Support

### TECHNOLOGIES:

- Embedded Computers
- Microcontrollers
- ✓ Visual Software
- ✓ Control Software
- ✓ Data Acquisition
- ✓ Computer Based Control
- ✓ Communications - GPIB
- System Integration

### SPECIAL FEATURES:

- ✓ Mobile Test Enclosure for Easy Transportation
- ✓ Multiplexed HiPot & Continuity Test
- ✓ Interlocked Test Enclosure for Operator Safety
- ✓ Configurable Multi-Model Lookup
- ✓ DUT Specific Cable Connect Bulkheads