Model 2651

Field deployable test system for military and commercial maintenance depots.

- MIL-STD 810F Method 511.4 compliant for use in explosive environments
- MIL-PRF-28800 Class 3 for shock, vibration, temperature and humidity
- Rugged for field deployment in harsh environments
- Flexible and configurable from a few test points to thousands
- Test wire harness, relay panels, circuit breakers and control assemblies at maintenance depot

DIT-MCO International

Model 2651
Field Deployable Test System

Portable and Rugged

Intrinsically Safe Operation

Modular and Reconfigurable

Open Architecture

Cost Effective

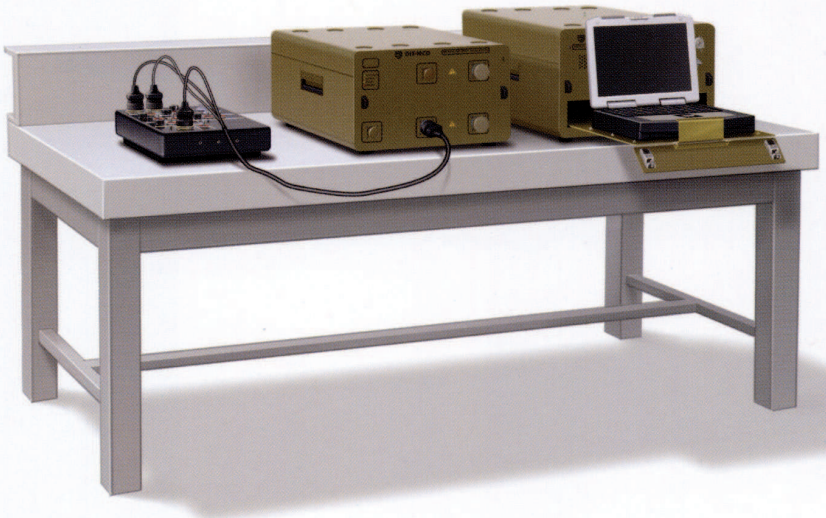
DIT-MCO International

Post Flight Maintenance

The portable Model 2651 facilitates validation verification, preventive maintenance and troubleshooting directly in the maintenance hangar, saving time so that the asset is returned to service faster.

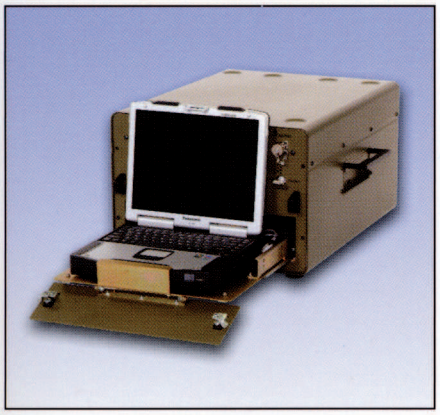
Backshop Unit Testing

Use the Model 2651 in the electronics workshops where assemblies are repaired to diagnose faults and qualify equipment after repairs are completed.

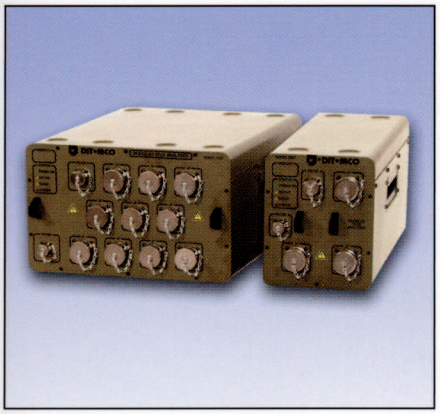


Configurations

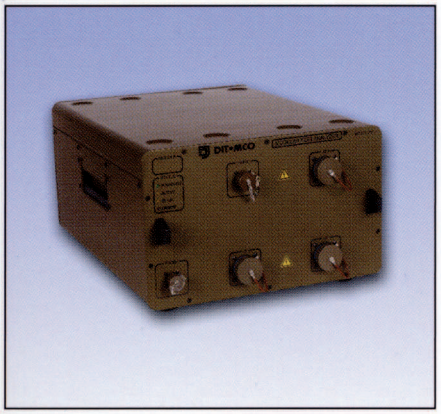
Arrange switching modules to accommodate changing test conditions in the most efficient manner possible.



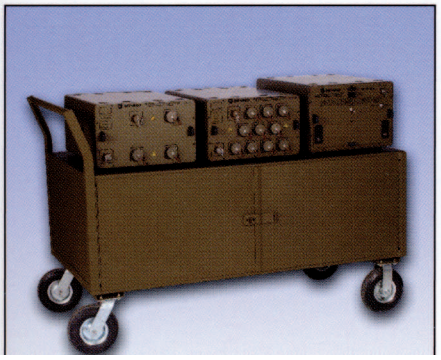
The 2651 controller includes a ruggedized notebook computer. Simply connect the controller to the switching modules and you are ready to test.



Switching modules are available with up to 500 or up to 1,500 test points. Typical configurations include 128 pin circular connector interfaces but can be customized to your requirement.



The Multiple Bus Architecture module provides random access connections to programmable power for component activation. With the MBA option, all test points can be power sources.



Transport the system to your maintenance location using carts with storage for tools and interface cables.

The Model 2651, *designed for use in intermediate and depot maintenance, reduces the time to diagnose faults and return the equipment to service.*

Versatile

- Tests wired assemblies such as cables, harnesses, relay control boxes, wired interface panels and control and circuit breaker assemblies.

Certified

- Operates in fueled and explosive environments with compliance to MIL-STD-810F Method 511.4.

Durable

- Certified to MIL-PRF-28800 Class 3 Shock & Vibration and Temperature & Humidity so that the system can be deployed in the harshest environments. Sealed covers guard against infiltration by dust, sand and rain.

Convenient

- Includes an embedded, ruggedized notebook computer mounted on extension slides. During storage and shipping, the computer is safely locked within the system controller. For operation, the computer is easily accessed by opening the storage drawer.

Modular

- Allows for the system to be expanded in increments of 100 switching points. Switching modules can be concentrated for a bench test or distributed over 75 meters (250 ft.) separation from the controller. The system can expand to over 100,000 test points to satisfy the largest test requirements.

Fault Locator

- Capable of testing insulation resistance, circuit continuity and hipot leakage, the system is well suited for testing wired assemblies. Additionally, components such as resistors, capacitors, diodes, switches and relays can be tested. Errors are presented with user-defined reference designators. DIT-MCO's Fault Locator technology even reports the location of faults in the wiring reducing the time required for repairs.

Component Testing

- EE points located in every module provide power for relays, lamps, switches and other components. Or choose the Multiple Bus Architecture (MBA) option and power can be connected directly through every test point in every module.

System Controller

- Single cable for control, instrumentation, energization and power
- Control cable segment total length of 250 ft. (75 meters)
- Safe DC voltage used in daisy chain cable for module power
- Expandable to over 100,000 test points
- Embedded, ruggedized notebook computer compliant with MIL-STD-810F Method 511.4
- Test speed up to 3,000 tests per minute
- High voltage disable lock for safe operation
- Controller dimensions: width 17.4" (44.1 cm), height 12.9" (32.7 cm), depth with covers 26.75" (67.9 cm)

Distributed Switching Modules

- Switching uses heavy-duty electromechanical relays
- Ten energization points available without additional boards
- Switching modules dimensions:
  - 15 slot module: width 17.4" (44.1 cm), height 11.3" (28.7 cm), depth with covers 26.75" (67.9 cm)
  - 5 slot module: width 8.6" (21.9 cm), height 11.3" (28.7 cm), depth with covers 26.75" (67.9 cm)
- Standard interface 128 point Mil-Spec circular connectors
- Optional interfaces with D-sub, modular EasyMate™, ZIF or to your specifications

Available Configuration Options

- 1,280 point switching module
- 384 point switching module optionally with MBA access
- Power sources for relay/component energization
- Switching boards with 100 test points
- Latching Matrix (LM) boards with 20 LM relays
- Multiple Bus Architecture (MBA) boards with 50 test points and two random access buses
- Continuity probe which connects to any module

Operating Conditions

- MIL-STD-810F Method 511.4 compliant
- MIL-PRF-28800 Class 3
- Relative Humidity: 30% – 80% (RH non-condensing)
- Temperature: 32°F – 122°F (0°C - 50°C)
- Power Options:
  - 115 VAC 50 – 60 Hz
  - 230 VAC 50 – 60 Hz

Standard Instrumentation (SMU)

- System accuracy
  - Continuity ±1%
  - Insulation ±3%
- Fully programmable
  - Voltage stimulus up to 1,500 VDC
  - Current stimulus up to 2A
  - Continuity resistance 0.01Ω to 99KΩ
  - Insulation up to 1GΩ
- Four-wire resistance measurement from 0.01Ω to 10Ω
- Floating instrument (ground isolated)
- Capacitance measurements 10pF – 5000μF
- Simultaneous insulation and hipot testing
- DC dielectric (hipot) currents or 0.5mA – 2.5mA
- DC voltage measurement
- AC voltage measurement (true RMS)

Standard Software

- TestLink® software includes:
  - TestEdit® – Text Editor for test programs and address correspondence
  - TestExecutive® – with self-programming and Write Error Program (WEP)
  - Compensated Continuity Resistance (CCR)
  - Syntax Checker
  - Diagnostics

Software Options

- TestAssistant® II - Test interface and program generation designer
- APG/Wiresort - Automatic Program Generation
- Checksum
- Conversion programs for TPS re-hosting
- TestStats® data analysis tool