

## **Fuel Quantity Test Set**

## DFQ40K

The DFQ40K is designed for and is compatible with all aircraft, which have AC capacitance, based Fuel Quantity Indicating Systems including those equipped with transient suppressors.

The DFQ40K has the ability to measure the insulation breakdown of tank units, wiring and connectors associated with the system, capacitance of the tank units which measure the level of fuel in the tanks and simulation of capacitances required to test and calibrate the aircraft indicating system.

In addition to performing the standard capacitance tests of the Tank(s) and or Compensator, the DFQ40K has an additional troubleshooting mode that will provide the user with a relative indication of a problem associated with the Phase of the return current like that provided by the Barfield 2548H tester. The DFQ40K measures Low Resistances, DC Voltage & Indicator Drive Current. The DFQ40K is also equipped to measure the Distance To Fault to localize problems with the HIZ coax, continuity of the Shield Monitor, if the aircraft is so equipped, and Bonding tests to 0.001 Ohm resolution.

The Simulator section has been redesigned to permit direct numeric entry of the desired Tank and/or Compensator capacitance to be simulated using a numeric keypad.

The panel connector labeled Com Link will be used with a new generation of Smart Cables. This feature may not be present on the initial release and may be configured as an available option on the test set. The concept is that the DFQ40K will read information stored in the cable specific to the aircraft type under test. At the push of a button, the DFQ40K will perform an Automated Test Routine (ATR) on the aircraft wiring and tank units, resulting in a PASS or FAIL message. Should the test result in a FAIL message, the test set will give clear indication as to the nature of the failure and likely source.

With the incorporation of the BACK, NEXT, MODE and RANGE pushbuttons to the panel membrane, switching the overall number of different screens, such as sub-menus to be displayed, is greatly reduced. This will simplify the screens and make it easier for the operator to learn and navigate. This also makes it possible to remove all pre-defined FUNCTION pushbuttons and embed those functions into the Soft Function key selection scheme.



## **Features**

- > Microprocessor based
- Completely self contained AC capacitance fuel quantity test system
- Measures capacitance, insulation, DC voltage, resistance and distance to fault
- > Capacitance simulation and indicator testing
- > Custom multi-line backlit graphic display
- Direct keypad entry of Tank and Comp simulation values
- > Uses all existing fuel quantity cables
- > Uses new generation of Smart Cables to perform Automated Test Routines
- Calibration date available from display with user alerts to approaching calibration date
- > Numerous user prompts
- > Powered from common "C" batteries with auto-off feature to conserve batteries

## **DFQ40K Dimensions**

	in.	cm.
Height	14.0	35.6
Width	12.0	30.5
Depth	6.0	15.2
	lbs.	kg
Weight	10.0	4.54

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