



ADAS: Automatic Data Acquisition System

Testek's Automatic Data Acquisition System— ADAS is the computerized "front end" for your test bench or mechanical fixture.

A stand-alone data acquisition and control system that can be connected to multiple test cells, ADAS provides highspeed, multichannel system data acquisition to record and plot pressures, flows, temperatures, position, velocity, drive current, and various signals as required by the test procedure for the Unit Under Test (UUT).

The ADAS can also provide data acquisition for non-Testek test systems or can be used in conjunction with small mechanical fixtures testing non-hydraulic components. Regardless of the application, through the use of adaptation, Testeks automatic data acquisition system has the capability to provide the following measurement types:

- Temperature
- Voltage
- Current
- Strain
- Load
- Pressure
- Resistance
- Power

ADAS offers a National Instruments LabVIEW based software package combined with state-of-the-art PC-based data acquisition hardware. No previous programming experience is necessary. Users can be easily trained to create or modify test programs using a point-and-click programming interface. Test Programs can also be created and purchased from Testek Solutions.



8 Measurement Types



Compatible with Non-Testek Solutions Equipment



Utilizes National Instruments LabVIEW



Create your own TPS or Allow us to for you



Dual Monitor Option

Programming Features of the ADAS include:

- Real-time data and graphical user interface with end user customization capabilities.
- Pre-programmed test routines eliminate operator error and provide for precise, repeatable testing.
- Test procedures are filed by CMM number and revision level, for complete configuration control of test setup files. Automatic programs can also be stored by UUT type (e.g. Actuator, Solenoid Valve) and UUT part number.
- Existing tests programs can be quickly copied using the "save as..." feature and used as a template for fast development of new test capability.
- Test reports are stored using Microsoft Excel compatible format.
- Adjustable Data acquisition rates, programmable limit values per channel, plotting/viewing subdivision lines and axis values can all be varied per test.
- Includes programmable plot overlays for quick "pass/fail" analysis of test data.
- An offline version of ADAS is included which allows for data review and programming to be done on any Windows PC.

Dimension	Meas. (1 Monitor)	Meas. (2 Monitors)
Length	22 in. (55.88 cm)	22 in. (55.88 cm)
Width	24 in. (60.96 cm)	42 in. (106.68 cm)
Height	69 in. (175.26 cm)	69 in. (175.26 cm)

Specifications
Touchscreen Flat Panel LCD Monitor Resistant to Skydrol
8 Fully Isolated Differential Auxiliary Input Channels Available for External Transducers and Metering
8 General Purpose Form-C relay contact sets for use with UUT electrical adapters.
Provides basic data acquisition suitable for testing simple UUT's such as actuators, hydraulic fuses, and relief valves
Additionally provides a 0-40VDC programmable DC Supply for UUT excitation
DC Supply is controlled with six solenoid operating controls, each with independent metering channels
Provides the added capability to support components such as selector valves and other UUT's which require solenoid stimulus
Additionally provides a programmable UUT servo amplifier which provides up to two (2) control channels complete with closed loop control at up to 80mA
Servo amplifier is controlled by Testek's exclusive soft panel which optimizes control for typical servo valve and other UUT tests
Typical function generator sweep available, such as sinusoidal, square wave, triangle wave, and others
Testek's exclusive Null Window feature allows testing to be optimized for null regions without wasting time in non-transient regions
Provides the added capability to support components such as 4-way and 3-way electrohydraulic servo valves
Additionally provides a North Atlantic LVDT measurement module which includes four (4) channels of LVDT measurement
Measurement channels may be configured for 2-wire or 3-wire style LVDT's
Module includes an on-board excitation supply, which provides a 2-28 VAC excitation signal at 400-3000 Hz
LVDT measurement signals can be directly inserted as feedback into the servo amplifier control loop allowing the precision and accuracy of North Atlantic measurement to be coupled with Testek's exclusive closed loop control
Closed loop provides programmable scale factors to accommodate individual control loop needs
Provides the added capability to test some of the most advanced UUT's, including Power Control Units (PCU) and other flight controls
Includes the Testek D910 LVDT Simulator Adapter to aide with calibration of the North Atlantic LVDT measurement module