FLUKE®

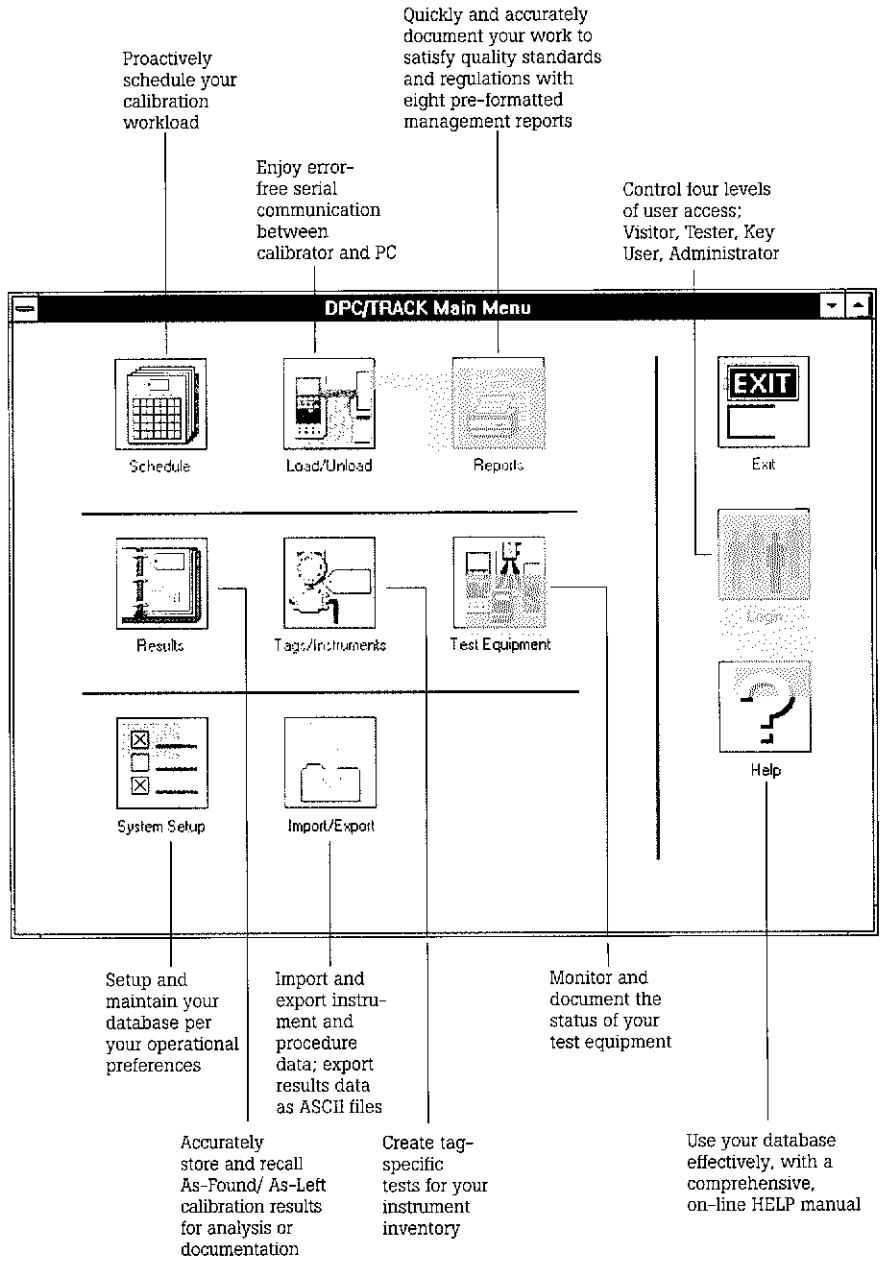
DPC/TRACK Software
For the Fluke-743 and -702 Documenting Process Calibrator

Technical Data

DPC/TRACK is a powerful data base for the management and maintenance of process control instrumentation. Used in conjunction with a Fluke 743 or 702 DPC (Documenting Process Calibrator), DPC/TRACK offers:

- A user-friendly environment for scheduling calibrations and creating test procedures
- Fast, automatic execution of tests and calibrations
- Consistent, accurate capture of instrument calibration data
- Thorough, cost-effective documentation of instrument maintenance and calibrations

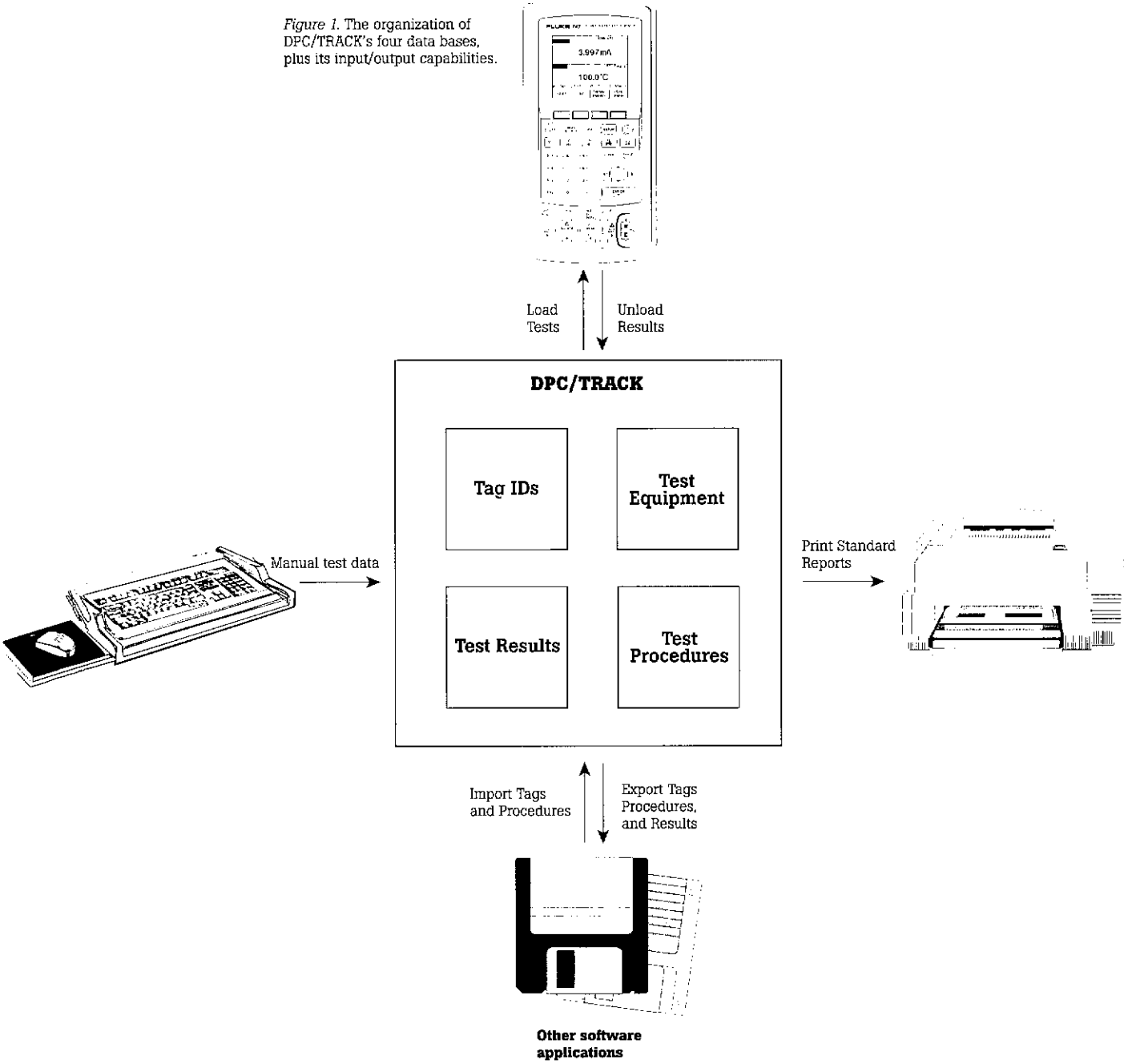
DPC/TRACK empowers you to...



DPC/TRACK:

- Supports an unlimited number of Tag IDs, Test Equipment, Results, and Procedures
- Produces eight pre-formatted reports, including Reverse Traceability to instruments tested
- Complements the multilingual capabilities of the 743 and 702, and operates in English, French, German, Italian, and Spanish
- Accepts manually-entered results as well as data uploaded from the 743 or 702
- Confirms that Test Equipment is in certification on the date of a test
- Helps ensure that Test Equipment is adequate for a particular test
- Provides a more powerful package replacing Fluke-702S PMLink Software for the Fluke-702 calibrators

Figure 1. The organization of DPC/TRACK's four data bases, plus its input/output capabilities.



With DPC/TRACK you can:

Manage your instrumentation...

The Instrument View window of DPC/TRACK permits you to enter and manage your instrumentation assets. A Search capability allows you to select a subset of your instruments. Then, to look at the specifics for any particular instrument, simply click on the appropriate tab: Instrument View (Figure 2), Setup (parameters, limits, and tolerance), Setup Cal (designation of a calibrator), and Test Procedure (Figure 3)

...create tests...

The Test Procedure Tab permits you to define a specific test for a chosen Tag ID. Default test points may be used, or tag-specific Test Strategies and Testpoints may be entered. Detailed Setup Messages (instrument locations, safety precautions and step-by-step instructions) and Wrapup Messages are entered here. Named procedures may be recalled for use.

Selected tests are marked for loading to the calibrator

...run tests on your DPC...

Using DPC/TRACK, you can load your chosen set of tests to the DPC (Figure 4). DPC/TRACK makes it quick and easy for technicians to run tests and to collect and document results that satisfy quality control and regulatory requirements.

- Press the "More Choices" softkey on the 743 and 702 until the "Tasks" softkey appears
- Press the "Tasks" softkey to view the list of tests loaded from DPC/TRACK
- Choose the test you want to run from the Task List
- The test begins with on-screen start-up instructions: location of the instrument, isolation instructions, connection instructions
- The DPC automatically runs the prescribed test, capturing As Found and As Left data for later unloading to a PC
- Tag-ID, Serial Number and Operator are automatically filled in
- Tests conclude with wrap-up instructions
- Upon returning to the shop, results are unloaded to a PC running DPC/TRACK

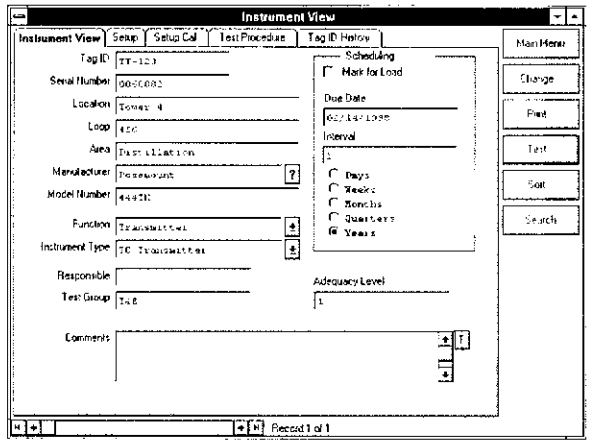


Figure 2.

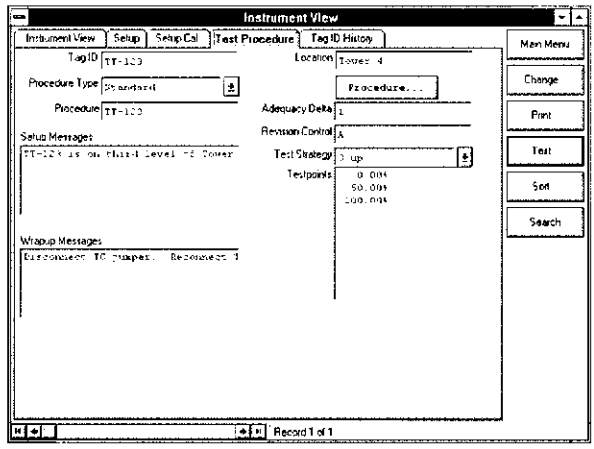


Figure 3.

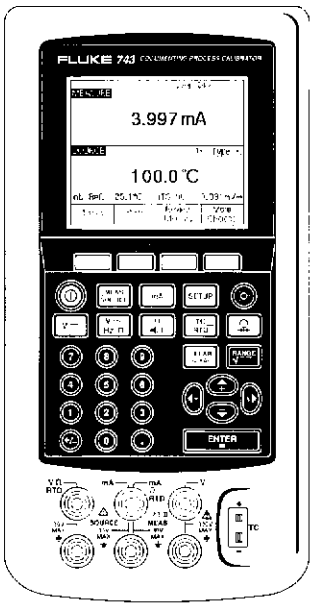


Figure 4.

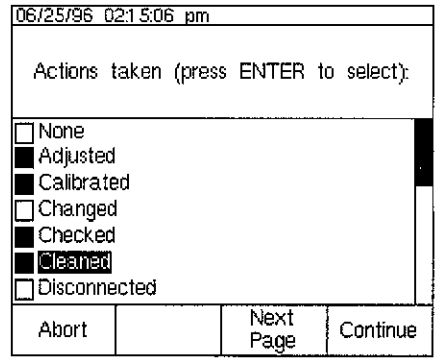


Figure 5.

Typical Applications

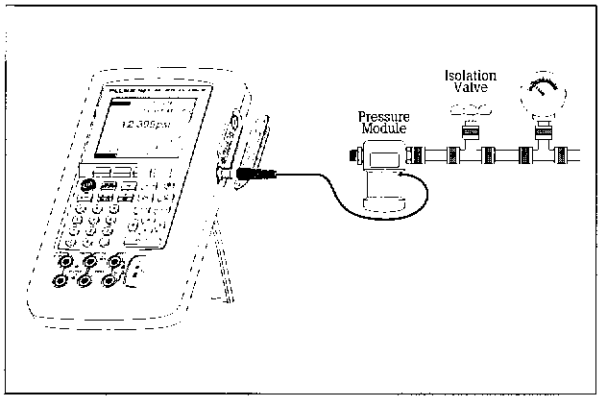


Figure 3. Typical configuration for measuring pressure.

Measuring pressure

To measure pressure, the appropriate pressure module for the pressure to be tested is attached to the calibrator. The measured pressure can be displayed in psi, mmHg, inHg, inH_2O, ftH_2O, bar, kPa or mH_2O.

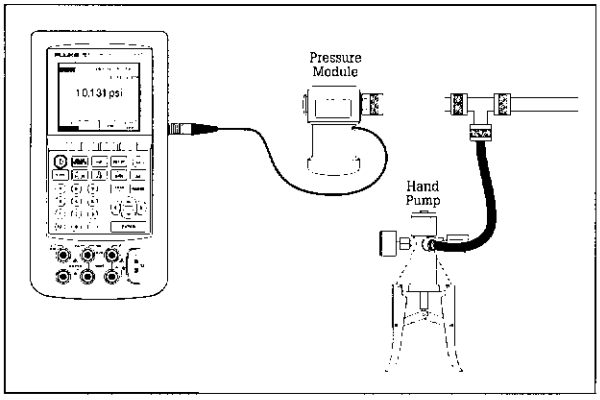


Figure 4. Typical configuration for sourcing pressure.

Sourcing pressure

To calibrate an instrument with pressure input, pressure from an external source (such as a hand-held pump) is applied. Prompts on the display indicate when to increase or decrease the input pressure, and when the specified test points are achieved.

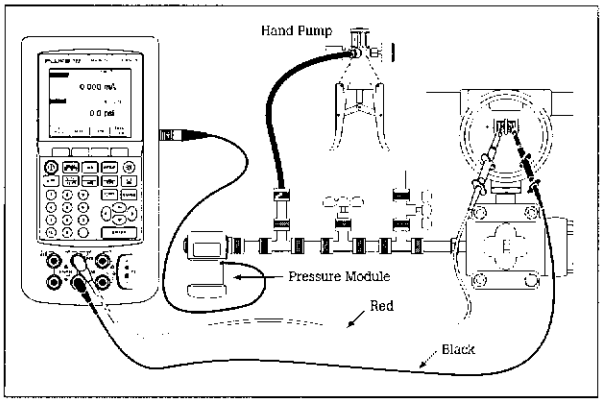


Figure 5. Typical configuration for using a pressure module to calibrate a P to I device.

P to I device calibration

The P to I device is used to convert pneumatic analog loop control signals of 3 psi to 15 psi to electrical loop analog control signals of 4 mA to 20 mA.

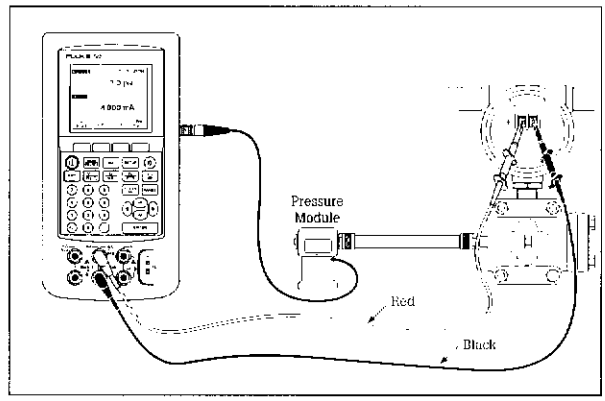


Figure 6. Typical configuration for using a pressure module to calibrate an I to P device.

I to P device calibration

The I to P device is used to convert electrical loop analog control of 4 mA to 20 mA to pneumatic analog loop control, generally 3 psi to 15 psi.

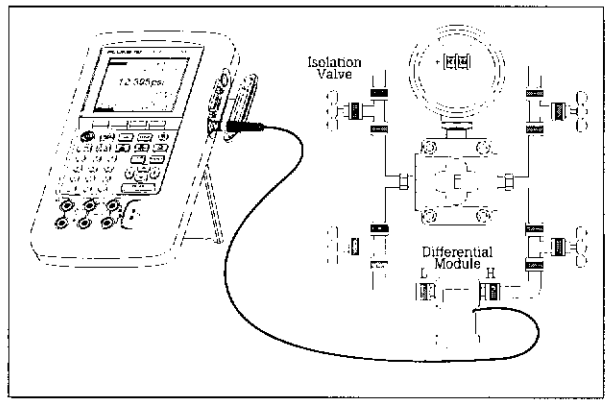


Figure 7. Typical configuration for differential pressure measurement.

Differential measurements

Differential pressure modules are useful in a wide variety of applications, e.g., measuring the fluid level in a tank or calibrating a differential pressure transmitter.

Export / Import File Descriptions

DPC/TRACK can import and export a rich collection of procedure and instrument data and export a wealth of results (history) data, all as tab-delimited ASCII files. The following table lists the data fields that may be imported to and exported from DPC/TRACK. Fields in bold apply only to the 743 calibrators. Other fields are accommodated on both the 743 and 702 calibrators.

PROC_IN.ASC PROC_OUT.ASC	INST_IN.ASC INST_OUT.ASC	HIST_OUT .ASC	
Adequacy Delta	AC/DC	**Action(s) Taken**	**TC Source Mode**
Procedure	Adequacy Delta	Amplitude	TC Type
Revision Control	Adequacy Level	**Base Input High**	TE Cert Status
Setup Messages	Amplitude	**Base Input Low**	TE Due Date
Test Strategy	Area	**Base Input Units**	TE Manufacturer
Testpoints	**Base Input High**	**Base Output High**	TE Model Number
Wrapup Messages	**Base Input Low**	**Base Output Low**	TE Serial Number
	Base Input Units	**Base Output Units**	Tag ID
	Base Output High	Calibrator Temp.	Temperature *(ambient)*
	Base Output Low	Comments	Temperature Units
	Base Output Units	Comments Modified	Test Date
	Current Mode	**DB Max**	Test Time
	Deadband Max	**DB Min**	Testers
	Deadband Min	**Delay**	Tolerance
	Delay	Excluded Record	Waveform
	Field List Choice	Final Status	AF Error
	Function	Function	AF Input
	In High	Humidity *(ambient)*	AF Linearity
	In Low	Input High	AF Max. Dev
	In Units	Input Low	AF Output
	Input Unit Type	Input Units	AF Result
	Instrument Type	**Input Unit Type**	**AF SP1 DB Max.**
	Interval Units	Instrument Type	**AF SP1 DB Min.**
	Interval Value	Logged Data	**AF SP1 Reset Point**
	Location	Logged Period	**AF SP1 Trip Error**
	Loop	Logged Requested	**AF SP1 Trip Point**
	Loop Power	Logged Start Date	**AF SP1 Trip Result**
	Manufacturer	Logged Start Time	**AF SP2 DB Max.**
	Measure Mode	Loop Power	**AF SP2 DB Min.**
	Model Number	Manufacturer	**AF SP2 Reset Point**
	Out High	Maximum	**AF SP2 Trip Error**
	Out Low	Measure Function	**AF SP2 Trip Point**
	Out Units	Measure Mode	**AF SP2 Trip Result**
	Output Unit Type	Minimum	AL Error
	Procedure	Model Number	AL Input
	Process	Output High	AL Linearity
	RJ Compensation	Output Low	AL Max. Dev.
	RJ Value	Output Units	AL Output
	RTD Type	**Output Unit Type**	AL Result
	RTD Wires	**Problem(s)**	**AL SP1 DB Max.**
	Responsible	Procedure	**AL SP1 DB Min.**
	SN	RJ Compensation	**AL SP1 Reset Point**
	Sensor Type	RJ Value	**AL SP1 Trip Error**
	Setpoint 1	RTD Type	**AL SP1 Trip Point**
	Setpoint 1 Direction	RTD Wires	**AL SP1 Trip Result**
	Setpoint 1 State	**Reason for Work**	**AL SP2 DB Max.**
	Setpoint 2	Reason for excluding	**AL SP2 DB Min.**
	Setpoint 2 Direction	Record Type	**AL SP2 Reset Point**
	Setpoint 2 State	SN	**AL SP2 Trip Error**
	Setup Messages	Sensor Data	**AL SP2 Trip Point**
	Source Mode	Sensor Type	**AL SP2 Trip Result**
	Square Root	**Setpoint 1**	
	Step Size	**Setpoint 1 Direction**	
	TC Source Mode	**Setpoint 1 State**	
	TC Type	**Setpoint 2**	
	Tag ID	**Setpoint 2 Direction**	
	Test Group	**Setpoint 2 State**	
	Test Type	Source Function	
	Testpoints	Source Mode	
	Tolerance	**Square Root**	
	Trip Function	Step Size	
	Waveform		
	Wrapup Messages		

How many DPCs may be supported by one DPC/TRACK?

One copy of DPC/TRACK can support an entire shop's collection of 743 and 702 Calibrators, typically up to 10 calibrators. DPC/TRACK is intended for single station use. While it can handle files located on any valid networked drive, it should not be considered a fully-networked software application.
System requirements:

- IBM compatible 486-50 computer (Fast Pentium™ 586 is strongly recommended)
- 8 MB RAM required (16 MB or more recommended)
- Microsoft Windows™ Version 3.1 or later (or Windows 95™)
- MS-Windows compatible pointing device
- MS-DOS™ Version 5.0 or later
- 20 MB hard disk space minimum, plus approximately 1 KB per record
- Graphics monitor and card (VGA color or better recommended)
- For calibrator communication:
  - RS232 serial asynchronous communication port
  - Compatible Fluke calibrator (743 or 702)
  - RS232 communications cable (9 pin, straight-through, male/female, Fluke part number 943738; supplied with Fluke-743 and Fluke-702)

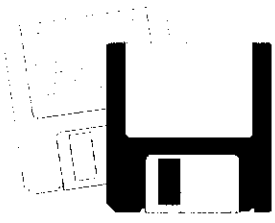
Comparison of 702 / 743 compatible software packages

Fluke-DPC/TRACK is a powerful, entry-level instrumentation data base. It replaces Fluke's previous PMLink software. Additional software alternatives are available from Fluke's software partners; Cornerstone, Honeywell Loveland, Sand Cove, and others. A top-level comparison is offered in the table below.

Capability	PMLink	DPC/TRACK	Fluke partners' software
Communication with 702	•	•	•
Communication with 743		•	•
Communication with calibrators of other manufacturers			•
Instrumentation database		•	•
Import of instrument and procedure data		•	•
Import of results data			•
Export of instrument and procedure data	•	•	•
Export of results data	•	•	•
Arbitrary test strategies		•	•
Manual input of calibration results		•	•
Fixed reports	•	•	•
Custom reports			•
Customized fields and screens			•
HART configuration and communication			•
Fully networkable			•

Ordering Information

Fluke-700SW DPC/TRACK Software includes software disks, users manual, serial port cable, DB9 to DB25 (9 pin to 25 pin) adapter.



See for yourself...

Evaluate DPC/TRACK on your own PC with the Demo Version of DPC/TRACK (G0397)
Contact your local Fluke sales organization, or call:
In the U.S.A: (800) 443-5853 or Fax (206) 356-5116
In Europe: (31 40) 2678200 or Fax (31 40) 2678222
In Canada: (905) 890-7600 or Fax (905) 890-6866

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