Fluke 740 Series Documenting Process Calibrators

For the calibration and troubleshooting of process control instrumentation.

- Calibrate temperature, pressure, voltage, current, resistance, and frequency instruments
- Built-in procedures for transmitters, square root transmitters and limit switches
- Simultaneously measure and source
- Automatically capture calibration results
- Document procedures and results to meet ISO 9000, EPA, FDA, OSHA, and other government requirements
- Measure/simulate 11 types of thermocouples and eight RTDs
- Store up to 8,000 readings in data logging mode (743B and 744 only)
- Protected against dirt, dust, and moisture; unaffected by vibration
- Includes a PC interface (743B and 744 only)
- Operate in English, French, German, Italian, and Spanish
- Offer one and two-year calibration cycles and a three-year warranty (one-year for pressure modules)

744: Get HART-ability

The Fluke 744 offers all of the capabilities of the 743B, plus the ability to calibrate, maintain, and troubleshoot HART instrumentation. Integrated HART communication functions permit you to monitor, control, and calibrate HART instrumentation. It handles fast pulsed instruments such as RTD transmitters and PLCs, with pulses as short as 1 ms.

See **www.fluke.com/744upgrade** for the latest list of HART instruments.

743B: More memory, plus a PC interface and data logging

The 743B has all the capabilities of the 741B plus a PC interface that lets you load procedures, lists, and instructions created with software – or unload data for printing, archiving, and analysis. With its expanded memory, the 743B can hold a full week of calibrations and procedures.

741B: A complete documenting calibrator

The 741B is the economical choice for plants that don't use PCs or that require traditional paper forms. It has storage capacity for a day's calibration and measurement data. When you're back at the shop, recall the data on-screen to fill out calibration forms.

HART® Transmitter Calibration Application Note
(Literature code 1262439)
The need for calibration of HART smart transmitters is often misunderstood. What do you calibrate and when? Here is a step-by-step procedure showing how to use the Fluke 744 to perform calibration and digital adjustments of Rosemount 3051 and 3144 transmitters and other HART devices.

Instrumentation management software
The Fluke 743B and 744 are compatible with Fluke 700SW DPC/TRACK software and with software from Beamex, Cornerstone, Fisher-Rosemont, Honeywell, On Time Support and Prime Technologies.

Specifications - 740 Series Calibrators

Function	Measure	Sourcing
DC voltage	0.025 % reading + 0.005 % full scale	0.01 % output + 0.005 % full scale
DC current	0.01 % reading + 0.015 % full scale	0.01 % output + 0.015 % full scale
Resistance	0.05 % reading + 50 mΩ	0.01 % output + 40 mΩ
Frequency	0.05 %	0.01 %
Thermocouples	0.3 °C	0.2 °C
RTDs	0.3 °C	0.1 °C
Pressure	To 0.05 % of full scale, per pressure module specifications.	

Summary specifications: best case, midrange, one-year.
Battery life: Typically over eight hours
Internal battery pack: NiCd, 7.2 V, 1700 mAh, NiMH 3500 mAh on 744.
Battery replacement: Via snap-shut door without opening calibrator; no tools required
Weight: 1.4 kg (3 lb 1 oz)
Size (HxWxD): 236 mm x 130 mm x 61 mm (9.3 in x 5.1 in x 2.4 in)

Recommended accessories – 740 Series Calibrators

C789	80PK-8	Fluke-700Pxx	80PK-25	TL220
See page 44	*See page 42*	*See page 27*	*See page 42*	*See page 39*

Included accessories
TL224 Industrial Test Leads (2 sets), AC220 Test Clips (2 sets), TP220 Test Probes, BP7217 Battery Pack, BC7217 Battery Charger, instruction manual, NIST Traceable calibration certificate and data, three year warranty, serial port cable (743B and 744 only), DPC/TRACK Sample Version with free PC communication utility software (743B and 744 only).

Additional 744 accessories
BP7235 NiMH Battery Pack, HART communications cable, HART user's manual, NIST Traceable calibration certificate and data, three-year warranty.

Ordering information
Fluke-741B	Documenting Process Calibrator
Fluke-743B	Documenting Process Calibrator
Fluke-744	Documenting Process Calibrator

Process