Fluke 754 Documenting Process Calibrator-HART

★★★★★ Model: Fluke 754

DOCUMENTING PROCESS CALIBRATOR with HART Communications

- Measure volts, mA, RTDs, thermocouples, frequency, and ohms to test sensors, transmitters and other instruments
- Source/simulate volts, mA, thermocouples, RTDs, frequency, ohms, and pressure to calibrate transmitters
- Power transmitters during test using loop supply with simultaneous mA measurement
- Measure/source pressure using any of 29 Fluke 700Pxx Pressure Modules
- Create and run automated as-found/as-left procedures to satisfy quality programs or regulations. Record and document results
- Holds up to a full week of downloaded procedures and calibration results

View Product Details

Description

Fluke 754 Process Calibrator

- Best in Class Accuracy Rating
- 3 Year Warranty
- Large Easy to Read Display
- USB Connectivity
- HART Connectivity
- Handling of fast pulsed RTD transmitters and PLCs, with pulses as short as 1 ms

In The Box

- BC7240 battery charger
- Li-on BP7240 battery pack
- DPCTrack 2 Sample Software
- Instruction manual
- Three sets of TP220 test probes with three sets of “extended tooth alligator clips
- Two sets AC280 hook clips
- C799 Soft Field Case
- USB communication

Process Calibrator

Fluke754

With HART Connectivity

Feedback

Introducing the ***Fluke 754*** Documenting Process Calibrator with HART communication capability. Fluke has designed the 754 to withstand the trial of everyday use with a rugged exterior shell. It is the perfect tool for calibration, maintenance and troubleshooting HART and other instruments.

The ***Fluke 754*** is designed to be an all-in-one tool. Its small size packs a number of important tools including sourcing, simulating pressure, measuring pressure, temperature and electrical signals. Even with all of these tools, the 754 manages to keep a user friendly interface and an easy to read large screen. The lithium ion battery provides longer life and a USB connection provides PC connectivity.

Compatability

The Fluke 754 is built to work in a variety of applications. It works with Fluke software and a assortment of other platforms including Emerson, Honeywell, Cornerstone, Yokogawa, Prime Technologies and Intergraph. The 754 is simple to use and makes it easy to create procedures, instructions and action lists to delivery quickly with simple documentation.

HART Communication

- No required external box or secondary tool for HART calibration or maitenance
- Fast HART communications
- Supports popular models of HART transmitters
- More devise-specific command support than any other HART field calibrator
- Works with multiple masters, burst mode, and multi-drop configurations.
- Is easy to update as additional instruments are added
- Interrogate to determine device type, manufacturer, model, tag.
- Reconfigure the sensor mapping of dual sensor temperature transmitters.
- Read HART PV function and smart transmitter while measuring analog mA output.
- Read and write HART configuration functions to make field adjustments

cable: 6 ft. type A to type mini-B

- 754 HCC Hart Communication Cable
- NIST calibration certificate

Manuals/Guides

Manuals

- Getting Started
- Getting Started Supplement
- Users Manual Supplement

Spec Sheets

- Fluke 750 Series Datasheet

Application Notes

- Fluke HART Transmitter Calibration Application Note
- Fluke 750 Series Transmitter Calibration Applilcation Note

MSDS Sheet

- Fluke Lithium Ion Batteries MSDS

Feedback

- Re-label smart transmitters by reading and writing to the HART tag field.

Additional Features

Automated Procedures

Setting up automated calibration procedures with the Fluke 754 is simple. They can be used in a variety of applications including linear transmitters, DP flow transmitters, and one & two point limit switches. After set up, the 754 will perform the necessary tests and calculate any errors. Users can then easily view final results and quickly locate out of tolerance points.

Custom Units

Gives users the ability to map one unit of measurement to another such as mV to ºC or ºF. This allows the 754 to be used with accessories that output in mV and still properly document th test using an unsupported unit of measurement including parts per million or rpm.

User-entered Values

Give users the ability to record results from external measurements devices such as a panel meter. This allows for comprehenssive data recording.

Limit Switch Calibration

Limit switch calibration is simple and fast with the 754's automated procedures. Procedures can be used for either one or two point switches and measure voltage, current, pressure and temperature.

Differential Pressure Flow Instrument Calibration

Built in square root functions quickly calibrate DP flow instruments.

Multifunctional

The 754 is able to calibrate temperature, pressure, voltage, current, resistance, and frequency. With these capabilities and the ability to both measure and source, the 754 can troubleshoot and callibrate.

Powerful & Simple

Users will find the Fluke 754's user interface easy to navigate and follow step by step through each procedure. Have your unit up and running with in a few minutes. Saving valuable time and money.

Records and documents results

The Fluke 754 seemlessly records all calibration data, perminately eliminating the need to transcribe results on a computer or piece of paper. This ensures that all results are recorded properly. The USB connection allows for easy data transfer to your computer.

Truly hand-held

Despite all of its features, the 754 is still able to maintain a compact and easy to transport design. It is compact enough to fit into most tool bags and can be used in tight work areas. The rechargable lithium ion battery

Feedback

provides enough battery for a standard day's use (approximately 10 hours)

Bright white display

The bright white display featured on the 754 offers users the ability to view results in real time indoors or outdoors. With 3 brightness settings, this display will work in any environment.

Soft keys

Fluke has added soft keys to the 754 giving users instant access to task lists, automated procedures, scaling, min/max, stepping and ramping, and review memory.

Rugged and reliable

Fluke has designed the 754 to withstand the rigors of daily usage. The strong urethane case can withstand the rough conditions brought on by an industrial environment.

Built-in algebraic calculator

Built-in math functions eliminate the need to make separate calculations after data is recorded. Eliminating opportunity for error during data transcription.

Operating Modes

Designed to be an all-in-one tool, the 754 has three separate operating modes including measure, source and a combination of both measure and source. This eliminates the need for multiple tools.

Manufacturer Specs

Measurement Accuracy

Voltage DC			1 Year	2 Years
	100.000 mV		0.02%+0.005 mV	0.03%+0.005 mV
	3.00000 V		0.02%+0.00005 V	0.03%+0.00005 V
	30.0000 V		0.02%+0.0005 V	0.03%+0.0005 V
	300.00 V		0.05%+0.05 V	0.07%+0.05 V
Voltage AC	Range 40 to 500 Hz	Resolution	1 Year	2 Years
	3.000 V	0.001 V	0.5%+0.002 V	1.0%+0.004 V
	30.00 V	0.01 V	0.5%+0.02 V	1.0%+0.04 V
	300.0 V	0.1 V	0.5%+0.2 V	1.0%+0.2 V

Feedback

Current DC	30.000 mA 110.00 mA	1 Year 0.01% + 5 uA 0.01% + 20 uA	2 Years 0.015%+7 uA 0.015%+30 uA

Resistance	10.000 Ω 100.00 Ω 1.0000 Ω 10.000 Ω	1 Year 0.05% + 50 mΩ 0.05% + 50 mΩ 0.05% + 500 mΩ 0.1% + 10 Ω	2 Years 0.07%+70 mΩ 0.07%+70 mΩ 0.07%+0.5 Ω 0.15%+15 Ω

Frequency	1.00 to 110.00 Hz 110.1 to 1100.0 Hz 1.101 to 11.000 kHz 11.01 to 50.00 kHz	Resolution 0.01 Hz 0.1 Hz 0.001 kHz 0.01 kHz	Accuracy (2 Years) 0.05 Hz 0.5 Hz 0.005 kHz 0.05 kHz

Source Accuracy

Voltage DC	100.000 mV 1.00000 V 15.0000 V	1 Year 0.01%+0.005 mV 0.01%+0.00005 V 0.01%+0.0005 V	2 Years 0.015%+0.005 mV 0.015%+0.0005 V 0.015%+0.0005 V

Current DC	22.000 mA (Source) Current Sink (Simulate)	1 Year 0.01%+ 0.003 mA 0.02% + 0.007 mA	2 Years 0.02%+ 0.003 mA 0.04% + 0.007 mA

Feedback

Resistance		1 Year	2 Years
	10.000 Ω	0.01% + 10 mΩ	0.015% + 15 mΩ
	100.00 Ω	0.01% + 20 mΩ	0.015% + 30 mΩ
	1.0000 Ω	0.02% + 0.2 Ω	0.03% + 0.3 Ω
	10.000 Ω	0.02% + 3 Ω	0.03% + 5 Ω

Frequency		2 Years
	0.1 to 10.99 Hz	0.01 Hz
	0.01 to 10.99 Hz	0.01 Hz
	11.00 to 109.99 Hz	0.01 Hz
	110.0 to 1099.9 Hz	0.1 Hz
	1.100 to 21.999 kHz	0.1 Hz
	22.000 to 50.000 kHz	0.002 kHz
		0.005 kHz

Technical Data

Data Log Functions	**Measure functions**	Voltage, current, resistance, frequency, temperature
	Reading rate:	1, 2, 5, 10, 20, 30, or 60 readings/minute
	Maximum record length:	8000 readings (7980 for 30 or 60 readings/minute)
Ramp Functions	**Source functions:**	Voltage, current, resistance, frequency, temperature
	Rate:	4 steps/second
	Trip detect:	Continuity or voltage (continuity detection not available when sourcing current)

Feedback

Loop Power Function	**Voltage:**	Selectable, 26 V
	Accuracy:	10%, 18 V minimum at 22 mA
	Maximum current:	25 mA, short circuit protected
	Maximum input voltage:	50 V DC
Step Functions	**Source Functions**	Voltage, current, resistance, frequency, temperature
	Manual Step	Selectable step, change with arrow buttons
	Autostep	Fully programmable for function, start delay, stepvalue, time per step, repeat

Environmental Specifications

Operating Temperature	-10 °C to +50 °C
Storage Temperature	-20 °C to +60 °C
Dust/water resistance	Meets IP52, IEC 529
Operating Altitude	3000 m above mean sea level (9842 ft)

Safety Specifications

Agency Approvals	CAN/CSA C22.2 No 1010.1-92, ASNI/ISA S82.01-1994, UL3111, and EN610-1:1993

Mechanical & General Specifications

Size	136 x 245 x 63 mm (5.4“ x 9.6 x 2.5)
Weight	1.2 kg (2.7 lb)
Batteries	**Internal Battery Pack Li-ion:** 7.2V, 4400mAh, 30 Wh
Battery Life	>8 hours typical
Battery Replacement	Via snap-shut door without opening calibrator; no tools required
Side port connections	Pressure module connector USB Connector to interface to your PC Connection for optional battery charger/eliminator
Data storage capacity	1 week of calibration procedures results

Feedback

90 day specifications	The standard specification interval for the 750 Series are 1 and 2 years Typical 90 day measurement and source accuracy can be estimated by dividing the one year "% of reading" or "%of output" specifications by 2 Floor specifications, expressed as "% of full scale" or "counts" or "ohms" remain constant.

Tech Specs

Process / Calibration/Multifunction Calibrators Template

Type	Hand Held
Measure Voltage	Yes
Loop Voltage Min	0.005 mV (0.000005 V)
Simulate Loop Voltage	Yes
Loop Voltage Max	26 V
Voltage Measurement Max	300 V
Voltage Measurement Min	0.005 mV (0.000005 V)
Source/Simulate DC Current	Yes
Measure DC Current	Yes
Current Measurement Max	110 mA
Current Measurement Min	5 uA (0.005 mA)
Source/Simulate Resistance	Yes
Measure Resistance	Yes
Resistance Measurement Max	10 K Ohms (10000 Ohms)
Resistance Measurement Min	50 M Ohms (50000000 Ohms)
Source/Simulate Frequency	Yes
Measure Frequency	Yes
Frequency Measurement Max	50 kHz (50000 Hz)

Feedback

Frequency Measurement Min	0.01 Hz
Measure RTD	Yes
Measure Thermocouples	Yes
Source/Simulate Pressure	No
Pressure Modules Available	Yes
Hart Compatible	Yes
FieldBus Compatible	No
Data Log Functions	Current, Frequency, Resistance, Temperature, Voltage
Backlighted	Yes
Graphical Screen	No
Types RTD/Thermocouples Accepted	B, C , E, J, K, L, N, R, S, T, U
Intrinsically Safe(Calibrators)	No

Test Equipment General Attributes

Unique Features	Holds up to a full week of downloaded procedures and calibration results. Use many features like autostep, custom units, user entered values during test, one-point and two-point switch testing, square root DP flow testing, programmable measurement delay etc. Rechargeable Li-Ion battery for 10 hour uninterrupted use. Includes gas gauge. Handling of fast pulsed RTD transmitters and PLCs, with pulses as short as 1 ms.
Warranty	3 YEARS
Safety Approval	CSA
IP Rating	IP52
Product Weight	2.7 LBS
Product Height	7.87 IN
Product Length	16.14 IN
Product Width	11.02 IN
Shipping Weight	11.2 LBS
Data Logging	Yes

Feedback