

Fluke Connect 789 ProcessMeter/ Temp Kit

Technical Data

Now compatible with Fluke Connect™ Mobile App

Double your power.

The Fluke 789 ProcessMeter is the ultimate troubleshooting tool for electricians and instrumentation professionals, combining the functionality of a loop calibrator with the power of a digital multimeter. By equipping the 789 with a temperature measurement module and the wireless data logging capabilities of Fluke Connect™ with ShareLive™ video call, process technicians can now do a lot more while carrying a lot less. And with its built-in, selectable 250 ohm HART® resistor, it eliminates the need to carry a separate resistor with you.

Use the included FC Connector with the Fluke 789 and get the full benefits of the Fluke Connect™ mobile app. Download it now and get started.

Fluke 789 Temp Kit features

- Unique new wireless measurement logging capability
- Temperature measurement from -200 °C to 1372 °C using the t3000 FC
- 24 V Loop power supply
- HART mode setting with loop power (adds 250 ohm resistor)
- 100 % larger dual display
- 1200 ohm drive capability on mA source
- Enhanced backlight with two brightness settings
- 0 % to 100 % mA Span Check buttons to toggle between 4 and 20 mA
- Infrared I/O serial port compatible with FlukeView® Forms Software Version 2.1
- Externally accessible fuses for easy replacement



Built with
**FLUKE
CONNECT™**

See it. Save it. Share it. All the facts, right in the field.

Fluke Connect with ShareLive™ video call is the only wireless measurement system that lets you stay in contact with your entire team without leaving the field. The Fluke Connect mobile app is available for Android™ and iOS and works with over 20 different Fluke products—the largest suite of connected test tools in the world. And more is on the way. Go to the Fluke website to find out more.

Make the best decisions faster than ever before by viewing all temperature, mechanical, electrical and vibration measurements for each equipment asset in one place. Get started saving time and increasing your productivity.

Download the app at:



Smart phone not included with purchase.



These 787 features are also included in the 789

- DMM designed to meet 1000 volt IEC 1010 CAT III standards
- Precision 1000 V, 440 mA true-rms digital multimeter
- Frequency measurement to 20 kHz
- Min/Max/Average/Hold/Relative modes
- Diode test and continuity beeper
- Simultaneous mA and % of scale readout
- 20 mA dc current source/loop calibrator/ simulator
- Manual step (100 %, 25 %, Coarse, Fine) plus Auto Step and Auto Ramp
- Externally accessible battery for easy battery changes

Measurement function	Range and resolution	Best accuracy (% of reading + LSD)	
V dc	400.0 mV, 4.000 V, 40.00 V, 400.0 V, 1000 V	0.1 % + 1	
V ac (true-rms)	400.0 mV, 4.000 V, 40.00 V, 400.0 V, 1000 V	0.7 % + 2	
mA dc	30.000 mA	.05 % + 2	
A dc	1.000 A (0.440 A continuous)	0.2 % + 2	
A ac	1.000 A (0.440 A continuous)	1 % + 2	
Resistance	400.0 Ohms, 4.000 k, 40.00 k, 400.0 k, 4.0 M, 40 M	0.2 % + 1	
Frequency (0.5 Hz to 20 kHz)	199.99 Hz, 1999.9 Hz, 19.999 kHz	.005 % + 1	
Diode Test	2.000 V (shows diode voltage drop)	2 % + 1	
Continuity	Beeps for resistance < approx. 100 ohms		
Output function	Range and resolution	Drive capability	Accuracy (% of span)
DC Current Output (Internal battery operation)	0.000 to 20.000 mA or 4.000 to 20.000 mA (selectable at power-up) Over-range to 24.000 mA	24 V compliance, or, 1,200 Ohms, @ 20 mA	.05 %
DC Current Simulate (Ext. 24 Volt loop supply)	0.000 to 20.000 mA or 4.000 to 20.000 mA, (selectable at power-up) Over-range to 24.000 mA	1000 Ohms, @ 20 mA	.05 %
24 V Loop Supply	Minimum 24 V	250 Ohms @ 20 mA	> 24 V
Current Adjustment Modes	Manual: Coarse, Fine, 25 % and 100 % step Automatic: Slow Ramp, Fast Ramp, 25 % step		

Temperature range of 18 °C to 28 °C, for one year after calibration

General specifications	
Maximum voltage applied between any jack and earth ground	1000 V rms
Storage temperature	-40 °C to 60 °C
Operating temperature	-20 °C to 55 °C
Temperature coefficient	0.05 x (specified accuracy) per °C (for temperatures < 18 °C or > 28 °C)
Relative humidity	95 % up to 30 °C; 75 % up to 40 °C; 45 % up to 50 °C; 35 % up to 55 °C
Vibration	Random, 2 g, 5-500 Hz
Shock	1 meter drop test
Safety	Designed in accordance with EN61010, ANSI/ISA S82.01-1994 and CAN/CSA C22.2 No. 1010..1-92 Over-voltage Category III
Size (HxWxL)	50 mm x 100 mm x 203 mm (1.97 in x 3.94 in x 8.00 in)
Weight	600 g (1.3 lb)
Battery	Four AA alkaline batteries
Battery life	140 hours typical (measurement), 10 hours typical (sourcing 12 mA)
Warranty	Three years

Ordering information

Model

FLUKE-789/T3000 FC Fluke Connect ProcessMeter/Temp Kit

Includes

789 ProcessMeter, T3000FC Wireless K-type temperature module, FLUKE-IR3000FC Connector, TL71 Premium Test Lead Set, AC72 Alligator Clips, four AA alkaline batteries (installed), users manual and quick reference guide

Optional accessories

IR3000FC Fluke Connect Infrared Connector

80T-IR Infrared Temperature Probe

80TK Thermocouple Module

80T-150U Universal Temperature Probe

TL20/TL22/TL24/TL26/TL28/TL40A

Test Lead Sets

AC20/AC80 Clips

TP20 Industrial Test Probes

80i-400 AC Current Clamp*

i410 AC/DC Current Clamp**

i1010 AC/DC Current Clamp**

C25/C100 Cases

80K-6/80K-40 High Voltage Probes

85RF High Frequency Probes

PV350 Pressure Vacuum Module

FOM Fiber Optic Meter

LPAK80-4 LockPak

TPAK ToolPak Meter Hanging Kit

*Above 50 A ac

**Above 1 A dc or 20 A ac

Fluke. Keeping your world up and running.®

Fluke Corporation

PO Box 9090, Everett, WA 98206 U.S.A.

Fluke Europe B.V.

PO Box 1186, 5602 BD Eindhoven, The Netherlands

For more information call:

In the U.S.A. (800) 443-5853 or

Fax (425) 446-5116

In Europe/M-East/Africa +31 (0) 40 2675 200 or

Fax +31 (0) 40 2675 222

In Canada (800)-36-FLUKE or

Fax (905) 890-6866

From other countries +1 (425) 446-5500 or

Fax +1 (425) 446-5116

Web access: <http://www.fluke.com>

©2014 Fluke Corporation.

Specifications subject to change without notice.

Printed in U.S.A. 2/2014 6002168A_EN

Modification of this document is not permitted without written permission from Fluke Corporation.