# Fluke 115 Multimeter 

勝 特 力 材 料 886－3－5753170
胜特力电子（上海）86－21－54151736
胜特力电子（深圳）86－755－83298787
Http：／／www．100y．com．tw

## Technical Data



## Actual size

5 T

## Compact true－rms meter for field service technicians

The Fluke 115 is the solution for a wide variety of electrical and electronic test－ ing applications．This true－rms meter provides easy one－handed operation in a compact package．

## Features include：

－Resistance，continuity，frequency，capacitance，and diode test
－Measures 10 A（ 20 A overload for 30 seconds）
－Large white LED backlight to work in poorly lit areas
－Compact ergonomic design for one－handed operation
－Compatible with optional magnetic hanger（ToolPak ${ }^{\mathrm{mm}}$ ）
－True－rms for accurate measurements on non－linear loads
－Min／Max／Average with elapsed time to record signal fluctuations
－CAT III 600 V safety rated

## General specifications

Accuracy is specified for 1 year after calibration，at operating temperatures of $18{ }^{\circ} \mathrm{C}$ to $28^{\circ} \mathrm{C}$ ，with relative humidity at $0 \%$ to $90 \%$ ．
The accuracy specifications take the form of：
$\pm$（［ \％of reading ］＋［ counts ］）

| Maximum voltage between any <br> terminal and earth ground | 600 V |
| :--- | :--- |
| Surge protection | 6 kV peak per IEC 61010－1 600 V <br> CAT III，Pollution Degree 2 |
| Fuse for A input | $11 \mathrm{~A}, 1000$ V FAST Fuse <br> （Fluke PN 803293） |
| Display | Digital：6，000 counts，updates 4／sec |
| Bar graph | 33 segments，updates 32／sec |
| Operating temperature | $-10^{\circ} \mathrm{C}$ to $+50^{\circ} \mathrm{C}$ |
| Storage temperature | $-40^{\circ} \mathrm{C}$ to $+60^{\circ} \mathrm{C}$ |
| Battery | 9 volt Alkaline，NEDA 1604A／ <br> IEC 6LR61 |
| Battery life | 400 hours typical，without backlight |

## Accuracy specifications

| Measurement | Range | Resolution | Accuracy $\pm$ ([\% of reading] + [counts]) |
| :---: | :---: | :---: | :---: |
| DC millivolts | 600.0 mV | 0.1 mV | $0.5 \%+2$ |
| DC volts | 6.000 V | 0.001 V | $0.5 \%+2$ |
|  | 60.00 V | 0.01 V |  |
|  | 600.0 V | 0.1 V |  |
| Auto volts | 600.0 V | 0.1 V | $2.0 \%+3(\mathrm{dc}, 45 \mathrm{~Hz}$ to 500 Hz$)$ $4.0 \%+3(500 \mathrm{~Hz}$ to 1 kHz$)$ |
| AC millivolts ${ }^{1}$ true-rms | 600.0 mV | 0.1 mV | $1.0 \%+3(\mathrm{dc}, 45 \mathrm{~Hz}$ to 500 Hz$)$ $2.0 \%+3(500 \mathrm{~Hz}$ to 1 kHz$)$ |
| AC volts ${ }^{1}$ true-rms | 6.000 V | 0.001 V | $1.0 \%+3(45 \mathrm{~Hz}$ to 500 Hz$)$ $2.0 \%+3(500 \mathrm{~Hz}$ to 1 kHz$)$ |
|  | 60.00 V | 0.01 V |  |
|  | 600.0 V | 0.1 V |  |
| Continuity | $600 \Omega$ | $1 \Omega$ | Beeper on $<20 \Omega$ off $>250 \Omega$; detects opens or shorts of $500 \mu \mathrm{~s}$ or longer. |
| Ohms | $600.0 \Omega$ | $0.1 \Omega$ | $0.9 \%+2$ |
|  | $6.000 \mathrm{k} \Omega$ | $0.001 \mathrm{k} \Omega$ | $0.9 \%+1$ |
|  | $60.00 \mathrm{k} \Omega$ | $0.01 \mathrm{k} \Omega$ |  |
|  | $600.0 \mathrm{k} \Omega$ | $0.1 \mathrm{k} \Omega$ |  |
|  | $6.000 \mathrm{M} \Omega$ | $0.001 \mathrm{M} \Omega$ |  |
|  | $40.00 \mathrm{M} \Omega$ | $0.01 \mathrm{M} \Omega$ | $1.5 \%+2$ |
| Diode test | 2.000 V | 0.001 V | $0.9 \%+2$ |
| Capacitance | 1000 nF | 1 nF | $1.9 \%+2$ |
|  | $10.00 \mu \mathrm{~F}$ | $0.01 \mu \mathrm{~F}$ |  |
|  | $100.0 \mu \mathrm{~F}$ | $0.1 \mu \mathrm{~F}$ |  |
|  | $9999 \mu \mathrm{~F}$ | $1 \mu \mathrm{~F}$ |  |
|  | $100 \mu \mathrm{~F}$ to $1000 \mu \mathrm{~F}$ |  | $1.9 \%+2$ |
|  | > $1000 \mu \mathrm{~F}$ |  | $5 \%+20$ |
| Lo-Z capacitance | 1 nF to $500 \mu \mathrm{~F}$ |  | $10 \%+2$ typical |
| AC amps true-rms ( 45 Hz to 500 Hz ) | 6.000 A | 0.001 A | $1.5 \%+3$ |
|  | 10.00 A | 0.01 A |  |
|  | 20 A overload for 30 seconds max. |  |  |
| DC amps | 6.000 A | 0.001 A | $1.0 \%+3$ |
|  | 10.00 A | 0.01 A |  |
|  | 20 A overload for 30 seconds max. |  |  |
| Hz (V or A input) ${ }^{2}$ | 99.99 Hz | 0.01 Hz | $0.1 \%+2$ |
|  | 999.9 Hz | 0.1 Hz |  |
|  | 9.999 kHz | 0.001 kHz |  |
|  | 50.00 kHz | 0.01 kHz |  |

## Notes:

${ }^{1}$ All ac voltage ranges are specified from $1 \%$ to $100 \%$ of range. Because inputs below $1 \%$ of range are not specified, it is normal for this and other true-rms meters to display non-zero readings when the test leads are disconnected from a circuit or are shorted together. For volts, crest factor of $\leq 3$ at 4000 counts, decreasing linearly to 1.5 at full scale. AC volts is ac coupled and ac mV is dc coupled.
${ }^{2}$ Frequency is ac coupled, 5 Hz to 50 kHz for ac voltage. Frequency is dc coupled, 45 Hz to 5 kHz for ac current.

Fluke. Keeping your world up and running. ${ }^{\text {™ }}$

## Fluke Corporation

PO Box 9090, Everett, WA USA 98206

## 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 40) 2675200 or
Fax (31 40) 2675222
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
©2006 Fluke Corporation. All rights reserved.
Specifications subject to change without notice. Printed in U.S.A. 10/2006 2634043 D-EN-N Rev B

