Power Meter Test Fixture

GPM-001

USER MANUAL

ISO-9001 CERTIFIED MANUFACTURER

GW INSTEK

Good Will Instrument Co., Ltd.
No. 7-1, Jhongsing Rd., Tucheng Dist., New Taipei City 236, Taiwan.

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INTRODUCTION

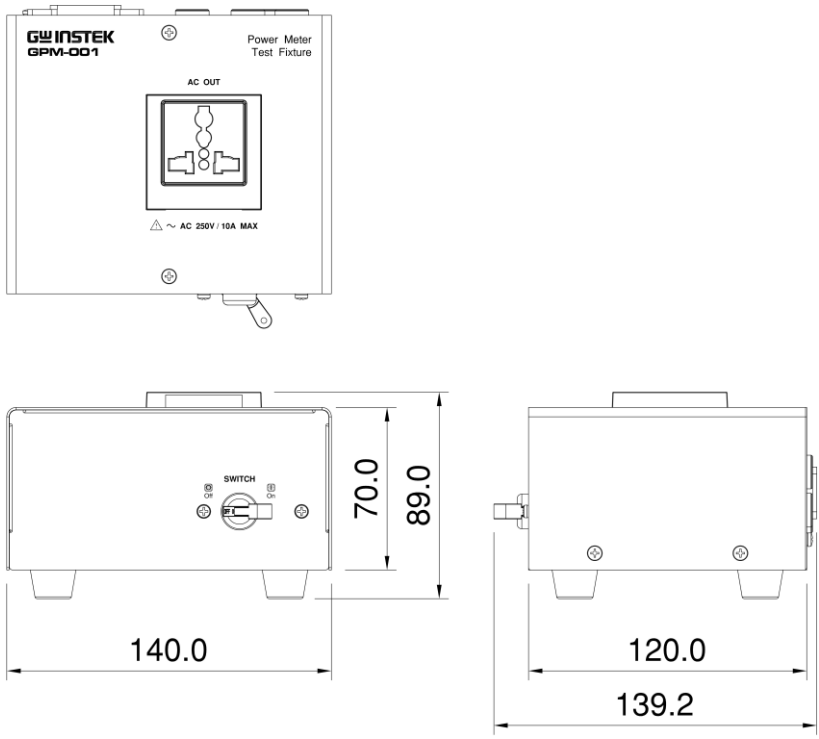
The GPM-001 power meter test fixture is an accessory designed by GW Instek for applying to the GPM-8213. It was designed for customers to handy use the four measurement terminals on the front panel of the GPM-8213 to test products, which eliminates the need for repetitive wiring as well as the trouble caused by wiring.

Package Contents

Check the contents before using the instrument.

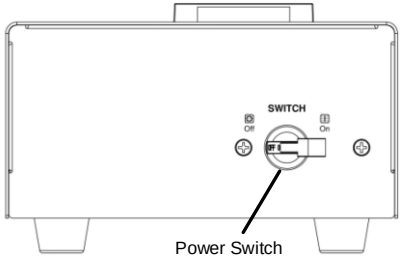
Contents	• Main unit	• Test leads (red x2, black x2)

Dimensions

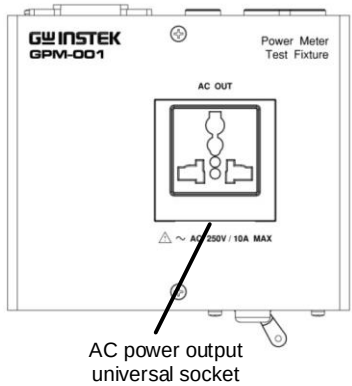

GW INSTEK
GPM-001
Power Meter
Test Fixture
AC OUT
AC 250V / 10A MAX
SWITCH
70.0
89.0
140.0
120.0
139.2

Appearance

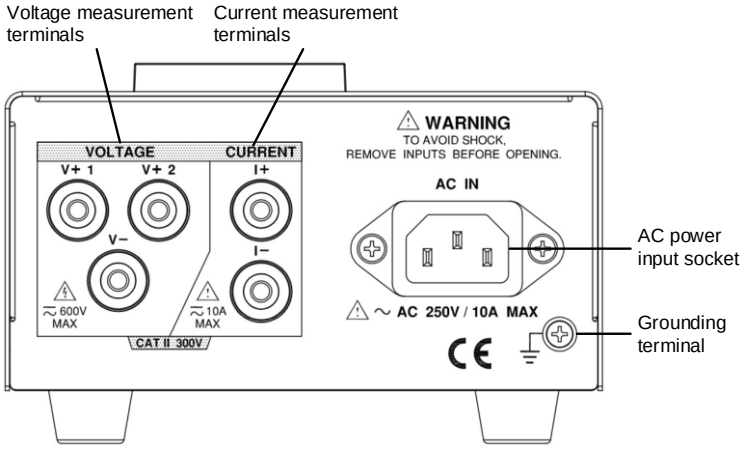
Front Panel



Upper Panel



Rear Panel



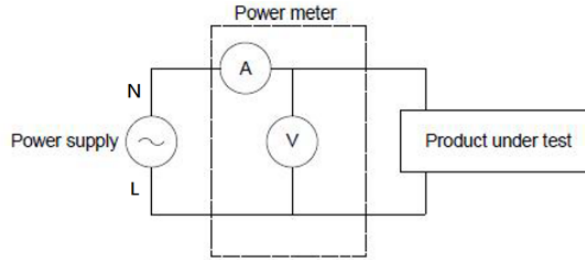
CONNECT THE FIXTURE

Use the GPM-001 power meter test fixture to perform the AC input power consumption test of product. Connect the GPM-001 in series to the DUT and the mains. The wiring method is related to the test accuracy. Two kinds of wiring methods are suggested as below.

Wiring method

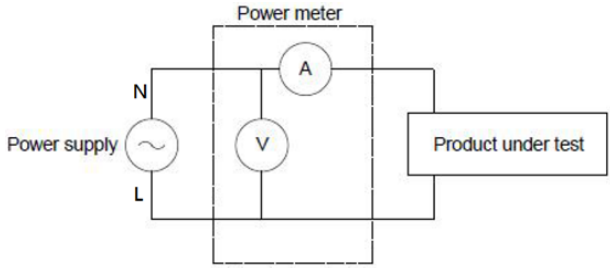
When measuring a larger current

Connect the voltage measurement terminal to the side of the load. Please use V+2 and V-terminal as voltage measurement terminals and I + and I- terminal as current measurement terminals.



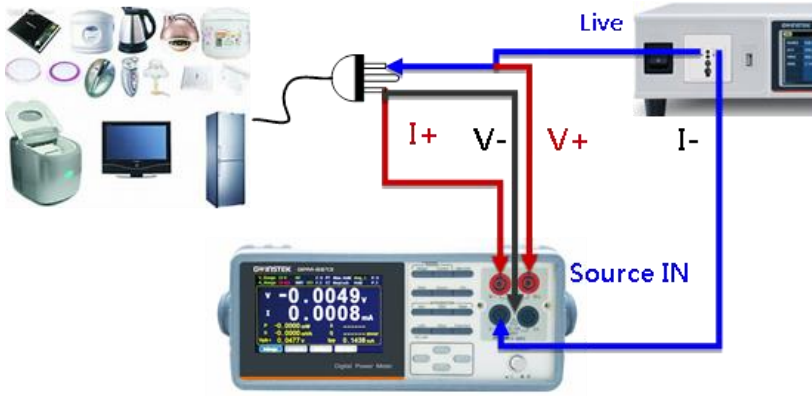
When measuring a smaller current

Connect the voltage measurement terminal to the side of power supply input. Please use V+1 and V-terminal as voltage measurement terminals and I + and I- terminal as current measurement terminals.


Power meter
A
N
Power supply
V
Product under test
L

Wiring method without using the test fixture

When the fixture is not used, it is necessary to cut the plug connected to the mains, and draw the three internal wires L, N and E. According to the principle of connecting in parallel for voltage and connecting in series for current, connect L and N wires to the voltage and current terminals of the power meter respectively and connect the E wire to the grounding terminal of the power meter.

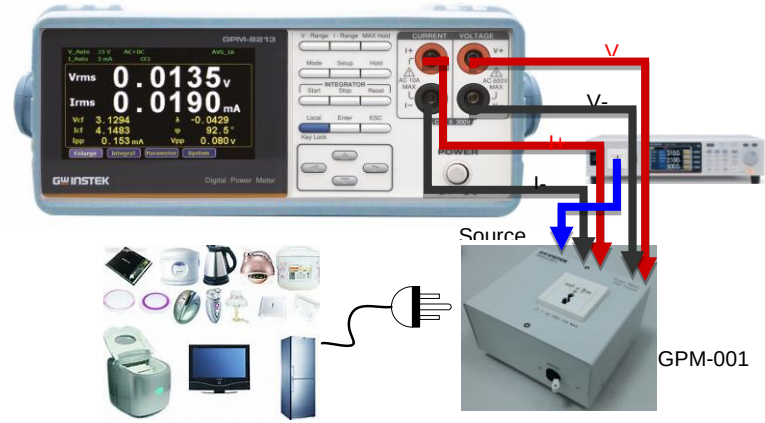


Wiring method when using the test fixture

When using a fixture, there is no need to destroy the original plug. The wiring method is really simple and details steps are described as below.

Steps

1. Insert the input terminal of DUT to the AC universal socket of the GPM-001 power meter test fixture.
2. The voltage terminal and the current terminal will be assigned automatically from the AC socket through the GMP-001 power meter test fixture. Connect the voltage and the current terminals of the fixture to the corresponding input terminals on the front panel of the GPM-8213 with test leads.
3. Connect AC power to the AC outlet on the rear panel of the GPM-001 power meter test fixture.
4. Turn on the AC power switch on the front panel of the GPM-001 power meter test fixture to start testing.


V
V-
I+
I-
Source
GPM-001