Power Meter Test Fixture

GPM-001

USER MANUAL

GW INSTEK PART NO. 82PM-00100MB1

ISO-9001 CERTIFIED MANUFACTURER

GW INSTEK

The information in this manual was correct at the time of printing. However, Good Will continues to improve products and reserves the rights to change specification, equipment, and maintenance procedures at any time without notice.

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INTRODUCTION

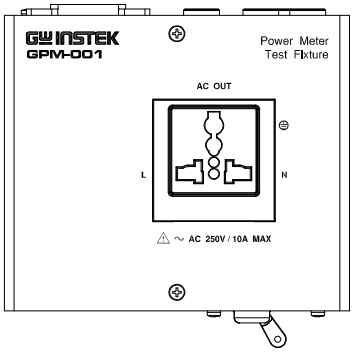
The GPM-001 power meter test fixture is an accessory designed by GW Instek for applying to the GPM-8213 and GPM-8310. It was designed for customers to handy use the four measurement terminals on the front panel of the GPM-8213 to test products, which eliminates the need for repetitive wiring as well as the trouble caused by wiring.

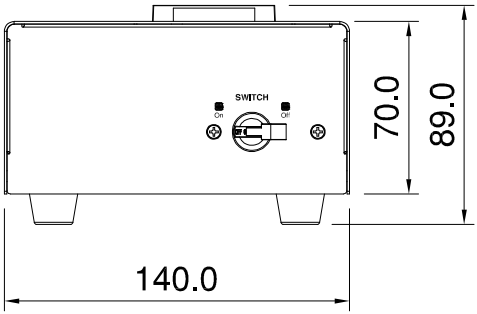
Package Contents

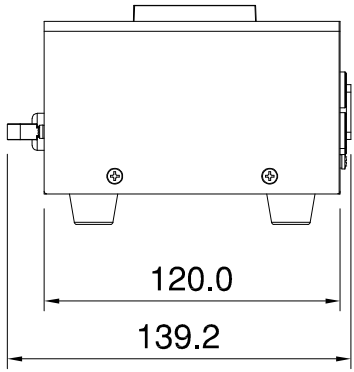
Check the contents before using the instrument.

Contents	• Main unit	• Test leads (red x2, black x2) • GTL-213 (blue x1, yellow x1)

Dimensions

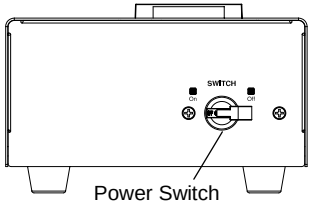

GW INSTEK
GPM-001
Power Meter
Test Fixture
AC OUT
L
N
AC 250V / 10A MAX


SWITCH
ON
OFF
70.0
89.0
140.0

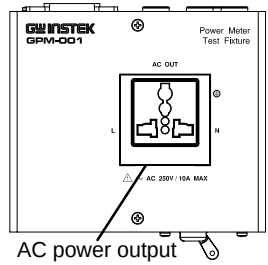

120.0
139.2

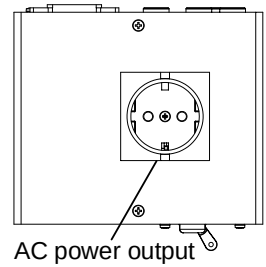
Appearance

Front Panel

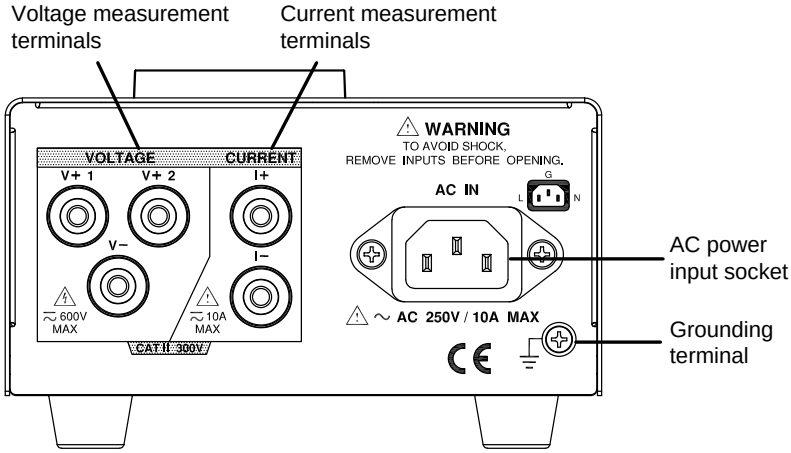


Upper Panel





Rear Panel



CONNECT THE FIXTURE

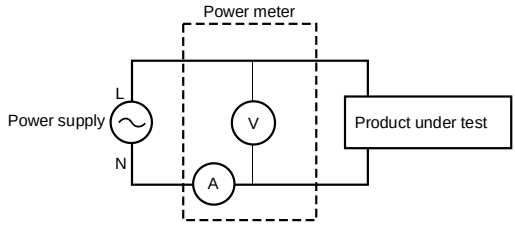
Use the GPM-001 power meter test fixture to perform the AC input power consumption test of product. Connect the GPM-001 in series to the DUT and the mains. The wiring method is related to the test accuracy. Two kinds of wiring methods are suggested as below.

Wiring method of GPM-8213

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.

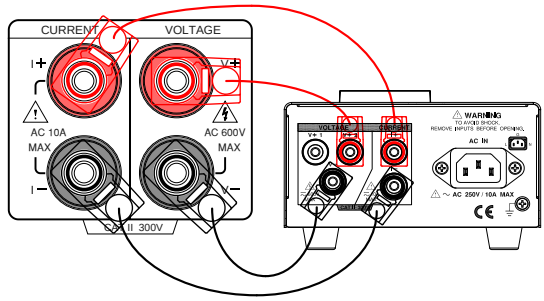
Connection



Power loss = (Input voltage[V])^2/2.4MΩ

Note

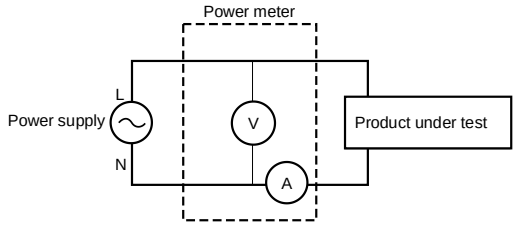
When switch is on and, without DUT wired, namely no load, V+2 and V- terminals are well connected, a current value, which is calculated by "Input Voltage/2.4MΩ", will be generated.



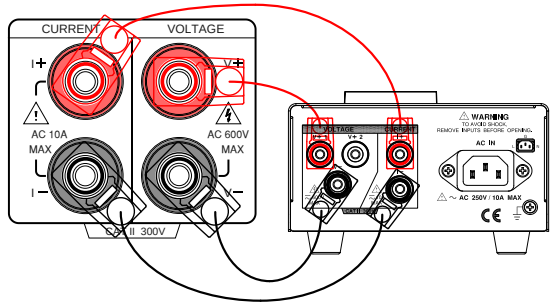
When measuring a smaller current

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.

Connection



Power loss = (Input current[A])^2 x 500mΩ



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.

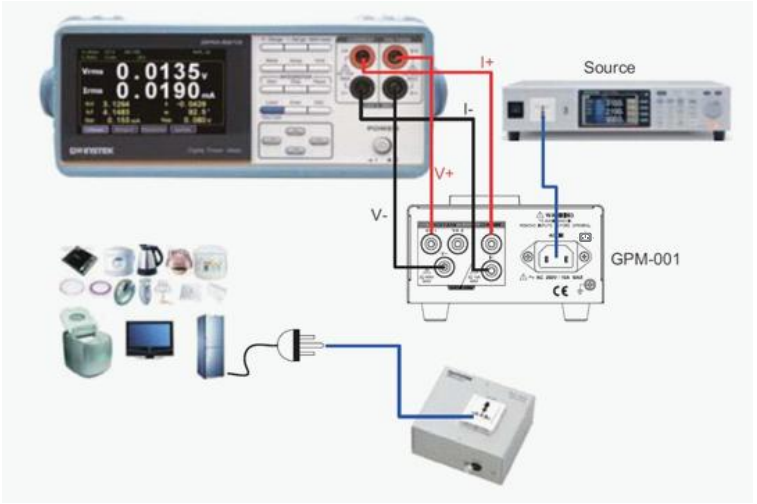
Steps

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.

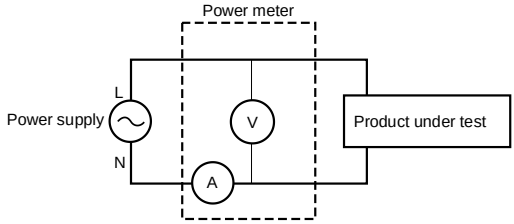


Wiring method of GPM-8310

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.

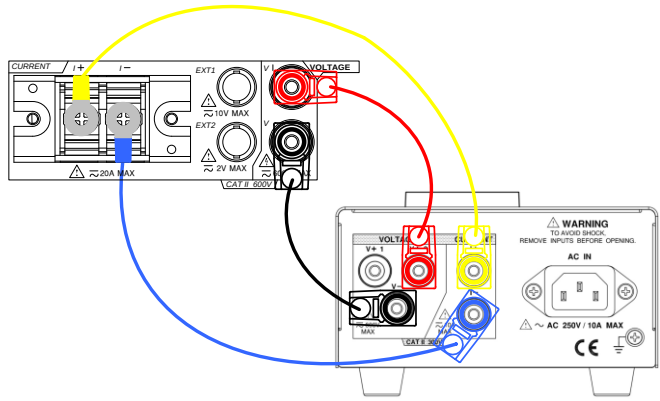
Connection



Power loss = (Input voltage[V])²/2MΩ

Note

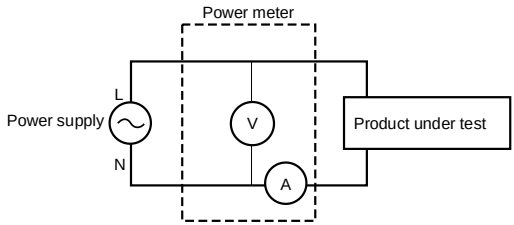
When switch is on and, without DUT wired, namely no load, V+2 and V- terminals are well connected, a current value, which is calculated by "Input Voltage/2.4MΩ", will be generated.



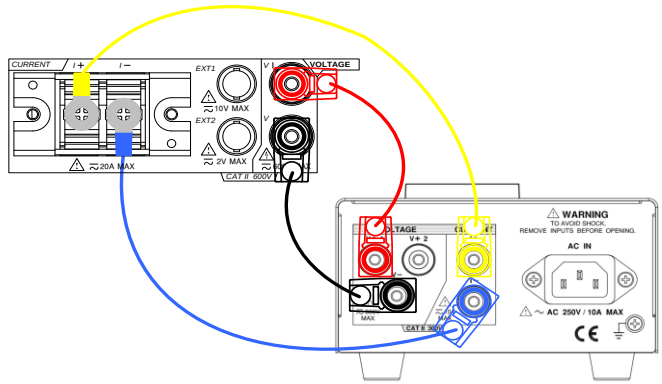
When measuring a smaller current

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.

Connection



Power loss = (Input current[A])^2 x 505mΩ



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 rear panel of the GPM-8310 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.