

4010A Series Digitizing Power Meter GPIB

4010A 300V, 20A, 6000W

4011A 600V, 20A, 12000W

4012A 300V, 5A, 1500W

Real Time Digital Sampling



Features

- Digital RMS for Vrms , Arms
- Digital Integration for Watt , PF
- 0.1% High Accuracy
- V / A / W / PF display
- 1 Year Calibration Cycle
- Panel Calibration

Descriptions

- The 4010A/4011A/4012A was designed with new utilizing voltage and current digital sampling, digital root mean square, and digital integration.
- There are six Voltage and Current ranges providing high resolution and accuracy of V/A/W/PF readings.
- The lowest range of the Current is 0 ~ 0.125A (4012A) that is very suitable for Adapter No Load measurement.
- Utilizing internal high speed A/D, CPU, and EEPROM that 4010A/4011A/4012A can quickly measure and get accurate test reading.

Applications

- S.M.P.S.
- UPS
- Ballast and Lamp
- Home Appliance
- ATE system
- Green Computer / Monitor
- Adapter

Input Specifications

MODEL	4010A	4011A	4012A
VOLTAGE			
Ranges	30, 60, 100	60, 120, 200	30, 60, 100
Auto-ranging up	150, 200, 300V	300, 400, 600V	150, 200, 300V
Impedance	1MΩ on all Ranges		
Maximum Allowable input (Continuous)	300 Vrms AC 450V DC or peak AC	600 Vrms AC 900V DC or peak AC	300 Vrms AC 450V DC or peak AC
Max. allowable Input (for 1 min)	1000Vpeak	2000Vpeak	1000Vpeak
CURRENT			
Ranges	0.5, 1, 2, 5, 10, 20A		0.125, 0.25, 0.5, 1.25, 2.5, 5A
Auto-ranging up			
Impedance	0.11Ω on 0.5, 1, 2A Range 0.01Ω on 5, 10, 20A Range		0.4Ω on 0.125, 0.25, 0.5A Range 0.04Ω on 1.25, 2.5, 5A Range
Maximum Allowable input (Continuous)	20Arms AC (40A peak) 20A DC		5Arms AC (10A peak) 5A DC
Max. allowable Input (for 1 min)	40A		10A

Measurements Specifications

FUNCTION	VOLTAGE Vrms	CURRENT Irms	POWER Pav	POWER FACTOR P.F
Operating Theory	$\left[\frac{1}{256} \sum_{i=1}^{256} V_i^2 \right]^{1/2}$	$\left[\frac{1}{256} \sum_{i=1}^{256} I_i^2 \right]^{1/2}$	$\frac{1}{256} \sum_{i=1}^{256} V_i \times I_i$	$\frac{P_{av}}{V_{rms} \times I_{rms}}$
Crest Factor	UP to 1.5	UP to 2	Corresponds to V and A	
Accuracy	0.1% of Reading + 0.06% of Range	0.1% of Reading + 0.1% of Range	0.2% of Reading + 0.2% of Range	
Sampling Rate for Both V & A	11,520 to 16,640 samples/sec Normal Mode : 256 sample/cycle Average Mode : 1024 sample/4 cycle			
Fundamental Freq. Range	DC 45 Hz to 65 Hz (AC, AC+DC)			
Temp. Coefficient	Less than 0.025% of Range /°C			

AC Power : 115/230 Vac ±10%, 50/60Hz Weight : 4.5kg Dimension : 221(W)x88(H)x325(D)mm

Order Information

- ▶ **4010A** 300V · 20A · 6000W
 - ▶ **4011A** 600V · 20A · 12000W
 - ▶ **4012A** 300V · 5A · 1500W
- Options** 1M GPIB Cable
 2M GPIB Cable