

Unit 111, Dunston Innovation Centre Chesterfield, S41 8NG, U.K. Tel: +44 (0) 1246 452909 Fax: +44 (0) 1246 452942 Web: www.etps.co.uk Email: sales@etps.co.uk Sales: 0800 612 95 75

GT-4010A

Digitising Power Meter

Description

This range consists of 3 digitising power meters that are used to measure both AC & DC Loads. Each unit is built with front panel control and display and includes an IEEE 488.2 interface as standard. A total of 6 automatic switching ranges provide a tight resolution and high accuracy of the voltage and current being measured. Digital integration is used to calculate the power factor and actual power being taken by the unit under test. Applications include power supply, computer, lamp and ballast and monitor testing. The 4012A is particularly suitable for adapter no load measurement as its lowest current range is 0-125mA. The GPIB interface makes this unit ideal for integration into automated test systems. The carrying handle and low weight of 4.5kgs also make this unit suitable for mobile users. Retractable legs provide a good viewing angle.



- Six Voltage & Current Ranges
- Digital Integration for W & PF
- Front Panel Calibration
- V/I/W/PF Display
- High Accuracy

Selection Table

Part Number	Maximum Power	Maximum Voltage	Maximum Current	Dimensions (WxHxD)
GT-4010A	6000W	300V	20A	221 x 88 x 325mm
GT-4011A	12000W	600V	20A	221 x 88 x 325mm
GT-4012A	1500W	300V	5A	221 x 88 x 325mm

Options Table

Code	Description
/0001	1m IEEE488.2 cable
/0002	2m IEEE488.2 cable





GT-4010A

Digitising Power Meter

Unit Input Specifications

GT-4010A	Voltage	Current		
Ranges 1-6	30, 60, 100, 150, 200, 300V	0.5, 1, 2, 5, 10, 20A		
Impedance	1m on all ranges	0.11 (on ranges 0.5, 1, 2A), 0.01 (on ranges 5, 10, 20A)		
Max. AC Continuous Input	300Vrms AC	20 Arms AC (40A peak)		
Max. DC Continuous Input	450VDC or peak AC 20ADC			
Max. Allowable Input (for 1 min)	1000V peak	40A		
GT-4011A	Voltage	Current		
	<u> </u>			
Ranges 1-6	60, 120, 200, 300, 400, 600V	0.5, 1, 2, 5, 10, 20A		
Impedance	1m on all ranges	0.11 (on ranges 0.5, 1, 2A), 0.01 (on ranges 5, 10, 20A)		
Max. AC Continuous Input	600Vrms AC	20 Arms AC (40A peak)		
Max. DC Continuous Input	900VDC or peak AC	20ADC		
Max. Allowable Input (for 1 min)	2000V peak	40A		
GT-4012A	Voltage	Current		
Ranges 1-6	30, 60, 100, 150, 200, 300V	0.125, 0.25, 0.5, 1.25, 2.5, 5A		
Impedance	1m on all ranges	0.4 (on ranges 0.125, 0.25, 0.5A), 0.04 (on ranges 1.25, 2.5A)		
Max. AC Continuous Input	300Vrms AC	5 Arms AC (10A peak)		
Max. DC Continuous Input	450VDC or peak AC	5ADC		
Max. Allowable Input (for 1 min)	1000V neak	10Δ		

Common Technical Data

Measurement Specifications	Voltage Vrms	Current _{Irms}	Power Pav	Power Factor P.F.	
Operating Theory	$\left[\begin{array}{ccc} 1 & 256 \\ 256 & ? \end{array} \right] Vi^2$	$\left[\begin{array}{ccc} 1 & 256 \\ 256 & ? \end{array} \right]_{=1}^{1/2}$	1 256 ? Vi x li	Pav Vrms x Irms	
Crest Factor	Up to 1.5	Up to 2	Corresponds to V & A	Corresponds to V & 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	0.2% of reading + 0.2% of range	
Sample Rate for Both V & A	11, 520 - 16,640 samples/sec Normal Mode: 256 samples/cycle Average Mode: 1024 samples/cycle				
Fundamental	DC				
Frequency Range	45 to 65Hz (AC, AC+DC)				
Temperature Coefficient	Less than 0.025% of range/°C				