

PA4400A Single & Three Phase AC Power Analyser

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An easy to use and powerful 3 phase 4 channel Power Analyser from Powertek

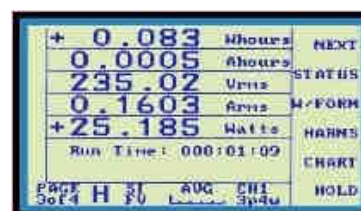
The PA4400A series offers single and three phase power analysis, with power meter and watt meter capability. Three phase power analyzers / watt meters are a necessity when several electrical measurements need to be recorded during testing - from one set of input connections. Three phase watt meters are important when accurate watts measurement necessary for certification and traceability. In addition to power measurement (watts), energy, reactive power (VA), apparent power (VA), voltage rms, current rms, power factor and harmonics, can all be viewed with ease. All Powertek power meters / wattmeters simply connect between the ac supply and the load, various current transformer and shunt options allow measurement with any level of current amplitude. Typical three phase watt meter applications include appliance testing like generators, electric stoves, heating, air conditioning, pumps, fans, electronic lighting and motor controllers. All our power meters are equipped with safety terminals (4mm/banana) along with optional "breakout boxes and clamp probes for fast and safe measurement.

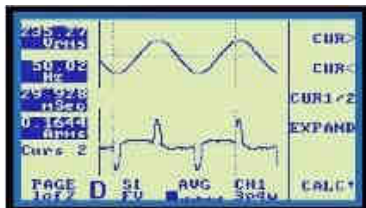


- 500 kHz Bandwidth
- 1440Vpk + 125Apk direct measurements (DC coupled)
- 4 Fully isolated and independently ranged input channels
- Up to 10 readings per second
- Torque/Speed input (option)
- PWM Filter for motor drives
- Flexible wiring configurations 3Ø4w+Torque, 3Ø4w+1Ø, 3Ø3w+3Ø3w etc.
- Harmonics to the 80th
- IEEE-488 and RS232 interfaces
- Integrator function with WHRS, AHRS and elapsed time
- 10 setup memories for storing individual configurations
- Efficiency & energy measurements
- 10 Chart recorder outputs (option)
- Inrush current measurement
- Printout graphics or lists

Multiple Parameter Display

View results on all four channels plus neutral and Sum. Choose between individual channels or all results on one page. Scaling factors may be applied to give correct readouts when using VT and CT. One key access to most display functions.



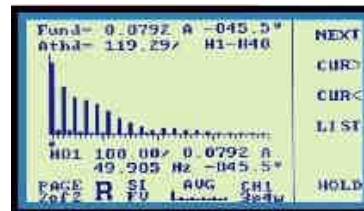


Waveforms + Chart Recorder Functions

View volts, amps and watts waveforms for each channel. Use datacapture to store and analyse transient events. A chart recorder function graphs a selected parameter over time.

Harmonic Analysis

Harmonic analyser allows user to view harmonic lists or bar graphs for all four channels. Amps and volts THD is calculated from the harmonic series



[pa4400a data sheet rev2.pdf](#)

Measurement Function		PA 4400A
Measurement Bandwidth	Range	DC, 0.2Hz to 500kHz
Volts	Display Resolution	4 3/4 digit
	Measurement Range	700mVrms to 1000Vrms (1440Vpk) (200mVrms with display blanking off)
	Vpeak Ranges	1440, 720, 220, 110, 33.0, 16.0, 5.00, 2.50
	Max input volts	1440Vpk Overload 3000Vrms for 1 second
	Accuracy	0.1% Reading +0.1% Range +10mV DC 0.5% Reading +0.5% Range +10mV
	Common mode	90dB
	Input impedance	1Mohm 12pF
Current	Display Resolution	4 3/4 digit
	Measurement Range	0.01Arms to 20Arms (125Apk) Ext Shunt 1mVpk to 4Vpk
	Apeak Ranges	125, 62.5, 22.0, 11.0, 3.50, 1.80, 0.6, 0.3
	Max input amps	20Arms continuous 125Apk
	Accuracy	0.1% Reading +0.1% range +2mA DC 0.5% Reading +0.5% Range +10mA
	Common mode	90dB
	Input impedance	0.02 Ohm
Power	Accuracy	0.1% Reading +0.1% range +2mW
VA	Accuracy	0.1% Reading +0.1% range +2mVA
VAR	Accuracy	0.1% Reading +0.1% range +2mVAR
General Specifications		
Interfaces	Standard	Printer (Centronics)
	Optional	IEEE-488, RS232, Chart Recorder x 10
Environment	Operating Temperature	0° C to +50° C
	Storage Temperature	-40° C to +60° C
	Humidity	10% to 90% RH non-condensing
Dielectric Strength	Inputs to case	4kV AC 50/60Hz for 1 minute
	AC line input to case	2kV AC 50/60Hz for 1 minute
Power	AC line input voltage	90V to 264V
	AC line input frequency	45Hz to 450Hz
	AC line input fuse	20mm 1AT
	Power consumption	25W/40VA
Mechanical	Weight	9.0kg
	Dimensions (W x H x D)	430mm x 144mm x 420mm

Options and description	
PA4400A-3	Three Phase Power Analyser - 3 Channel
PA4400A-4	Three Phase Power Analyser - 4 Channel
PA4400A-3-B	With Blank Front Panel
PA4400A-4-B	With Blank Front Panel
Option 68	Interface Board (use with Option 68A, 68B, 68C)
Option 68A	RS232
Option 68B	IEEE-488
Option 68C	Chart Recorder O/Ps * 10
Option 03	500A PA Series Current Transducer 100:1
Option 04	1000A PA Series Current Transducer 1000:1
Option 22	PA4400A Rack Mounting Kit
Option 25	HV 40kVpk 2000:1 Probe
Option 29	PA4400A-3 Test Lead Set
Option 29A	PA4400A-4 Test Lead Set
Option 43	PA4400A-3 UKAS Certificate
Option 44	3000A Clamp Current Transformer
Option 46	PA Series 1mA to 500mA non inductive shunt
Option 49	1250A/125A:1A (1500A max) 0.2% CT
Option 50	PA4400A-4 Torque/RPM Input
Option 51	Hall Effect sensor 50A Current CT
Option 52	Hall Effect sensor 100A Current CT
Option 53	Hall Effect sensor 200A Current CT
Option 54	Hall Effect sensor 300A Current CT
Option 55	Hall Effect sensor 500A Current CT
Option 56	Hall Effect sensor 1000A Current CT
Option 57	Wiring/Housing for LEM's (PSU not inc.)
Option 58A	1A PSU for Hall Effect Transducers (cased)
Option 63	AVLab 44 for PC

All products are CE marked and have IEC, EN or UL approvals.

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