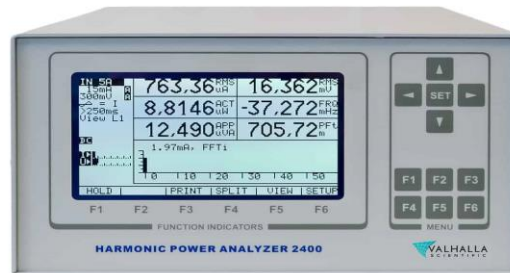


## Power Analyzer 2410-1S



High-performance precision in both single and three-phases: a wattmeter, oscilloscope, and power spectrum analyzer in one. The 2400 power analyzer measures, computes and displays critical power variables so you can concentrate on more efficient & reliable testing. The 2400 Series provides simultaneous, precise voltage and current measurements while monitoring and displaying the power parameters you need in the format that best fits your application.

### Extraordinary Features

- The analyzer inputs are all galvanically isolated.
- Broad band DC-300kHz.
- Wide input range (0.3V – 1000V, 15mA – 40A).
- Exceptional common mode rejection for use in frequency inverter driven systems.
- The accuracy is 0.1% (0.05% versions are available).
- The bright LCD monitor displays up to 10 measured values in well legible 9mm high numbers.
- The Three-Phase Power Analyzer puts up to 32 measured values on the screen.

Technical Specifications

Voltage	8 ranges: 0.3 V, 1 V, 3 V, 10 V, 30 V, 100 V, 300 V, 1000 V		
	Frequency range		DC, 0.1 Hz – 1 MHz
	Crest Factor		3:1 at 50 % full scale (fs)
	Input Impedance		1 MOhm
	Common Mode		50 Hz/100 kHz 160 dB/100 dB
	Standard accuracy 23°C; rms, mean, rectified mean; 0.3V typical		Improved accuracy
	1 Hz-1 kHz	±(0.1 % rdg +0.1 % range)	±(0.05 % rdg + 0.07 % range)
	DC, 1 kHz-10 kHz	±(0.2 % rdg +0.2 % range)	
	10 kHz-100 kHz	±(0.3 %/ range + 0.04 % /kHz rdg)	
	100 kHz-300 kHz	±(0.3 %/ range + 0.04 % /kHz rdg), typical	
Current	13 ranges: 1.5 mA, 5 mA, 15 mA, 50 mA, 150 mA, 500 mA, 1.5 A, 5 A; 1, 3, 10, 30, 100 A		Max. 1 A, 5 A, 30 A, resp.
	Frequency range		DC, 0.1 Hz-300 kHz / 1 MHz
	Crest Factor		3:1 at 50 % full scale (fs)
	Common Mode		50 Hz/100 kHz 160 dB/120 dB
	Standard accuracy 23°C; 1 A-, 5 A-, shunt input		30 A input Lowest ranges 1.5 mA, 15 mA,
	1 Hz-1 kHz	±(0.1 % rdg + 0.1 % rng)	±(0.1 % rdg + 0.1 % rng)DC, 1 kHz-10 kHz ±(0.2 % rdg + 0.2 % rng) ±(0.7 % 1 A: typical.
	rdg + 0.2 % rng)10 kHz-100 kHz	±(0.3 % range + 0.04 %/kHz rdg)	±(0.3 % rng + 0.5 %/kHz rdg), typ100 kHz-300 kHz ±(0.3 % range + Improved accuracy 1Hz-400 Hz
	0.04 %/kHz rdg), typical		±(0.05 % rdg + 0.07 % range)
	104 ranges corresponding to the products V x A.		
	Frequency range		DC, 0.1 Hz-300 kHz
Power	45 Hz-65 Hz		PF= 0 to ±0.1 PF= 0 to ±1 PF= 0 to ±1 PF=1
	1 Hz-1 kHz		
	DC, 1 kHz-10 kHz 10 kHz-100 kHz(0.1 % rdg + 0.01 % range)		
	Add accuracy percentage figures of current and voltage, +0.04 %/kHz PF		
	Frequency		0.1 Hz-400 kHz, V triggered; Accuracy ±0.1 %.
	Computed Values		Accuracy; Reactive Power, Var=±(VA2-W2)1/2, Apparent Power: VA=Arms Vrms; Power Factor: PF=W/VA; Crest Factor: CF=Ap/Arms, Vp/Vrms; Add accuracy percentage figures of values involved in computation.
	Form Factor: FF=At/Arms, Vt/Vrms; Impedance: Z=Vrms/Arms; Total Harm Dist: THD=(Irms2- Ifund2)1/2/Irms		
	Integrator		Energy, Charge; Accuracy
	Wh, Vah, Varh, Ah; Basic accuracy of integrated quantity.		
	Harmonic Analysis		Frequency range of fundamental 2.5 Hz-100 kHz
Display	Range of harmonic		1-99
	Accuracy, Harmonic current and voltage		
	2 Hz-1 kHz	±(0.1 % rdg + 0.1 % range)	1 kHz-10 kHz ±(0.5 % rdg + 0.5 % range)
	10 kHz-100 kHz	±(0.7 % range + 0.1 %/kHz rdg), typical	
	Blue liquid crystal graphic display with FL backlight		64×120 mm; 128 x 240 pixels
	Power		AC, 50-400 Hz; Fuse: Power
			85 V-240 V; 2 A, 15 VA
	Dielectric Strength		Inputs to case or power supply Line input to case
	Input to Input		2.5 kV/50 Hz/1 minute
	Dimension		1.5 kV/50 Hz/ 1 minute 4 kV/50 Hz/1 minute
Options	H x W x D; Weight		150 x 235 x 320 mm; 4 kg
	IEEE-488-2, RS232, Centronics printer output		0-±5 V, accuracy 0.2 % 0-±5 V, accuracy 0.2 % 0-±10 V accuracy 0.2 %
	4 programmable analog outputs; single-, sum-, or average values 4 analog inputs 0-±5V, input impedance 200 kΩ		
	4 analog inputs, 0-±10 V, input impedance 200 kΩ Rack Mounting Kit		
	Windows Operating Software 95, 98, 2000, NT, XP; transformer-motor testing		
	1.5mA-1A Inp/ Shunt Input		1 A input Hi against ILo Shunt
	Hi	Shunt Lo	1 A input, mA: 1.5, 5, 15, 50, 150, 500, 1500
			Shunt input, mV: 60, 60010, 600, 600V010, 6000, 6000010
			Input impedance: 60k
			1 A input: set scaling to 0.1 Shunt input: 60 mV corresponds to 1.0000 A