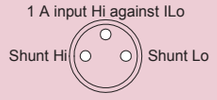
SPECIFICATIONS 106A

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 1 Hz-1 kHz ±(0.1 % rdg +0.1 % 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	Improved accuracy ±(0.05 % rdg + 0.07 % range)
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 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 % rdg + 0.2 % rng) 10 kHz-100 kHz ±(0.3 % range + 0.04 %/kHz rdg) ±(0.3 % rng + 0.5 %/kHz rdg), typ 100 kHz-300 kHz ±(0.3 % range + 0.04 %/kHz rdg), typical	Lowest ranges 1.5 mA, 15 mA, 1 A: typical. Improved accuracy 1Hz-400 Hz ±(0.05 % rdg + 0.07 % range)
Power	104 ranges corresponding to the products V x A.	
	Frequency range	DC, 0.1 Hz-300 kHz
	45 Hz-65 Hz (0.1 % rdg + 0.01 % range) 1 Hz-1 kHz Add accuracy percentage figures of current and voltage, DC, 1 kHz-10 kHz +0.04 %/kHz PF 10 kHz-100 kHz	PF= 0 to ±0.1 PF= 0 to ±1 PF= 0 to ±1 PF=1
Frequency	0.1 Hz-400 kHz, V triggered; Accuracy ±0.1 %.	
Computed Values	Accuracy; Reactive Power, Var=$\pm(VA^2-W^2)^{1/2}$, Apparent Power: VA=Arms Vrms; Power Factor: PF=W/VA; Crest Factor: CF=Ap/Arms, Vp/Vrms: Form Factor: FF=At/Arms, Vt/Vrms; Impedance: Z=Vrms/Arms; Total Harm Dist: THD=$(Irms^2-Ifund^2)^{1/2}$/Irms	Add accuracy percentage figures of values involved in computation.
Integrator	Energy, Charge; Accuracy Wh, Vah, Varh, Ah; Basic accuracy of integrated quantity.	
Harmonic Analysis	Frequency range of fundamental 2.5 Hz-100 kHz	
	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	
Display	Blue liquid crystal graphic display with FL backlight 64x120 mm; 128 x 240 pixels	
Power	AC, 50-400 Hz; Fuse: Power	85 V-240 V; 2 A, 15 VA
Dieletric Strength	Inputs to case or power supply Line input to case Input to Input	2.5 kV/50 Hz/1 minute 1.5 kV/50 Hz/ 1 minute 4 kV/50 Hz/1 minute
Dimension	H x W x D; Weight	150 x 235 x 320 mm; 4 kg
Options	IEEE-488-2, RS232, Centronics printer output 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	 0-±5 V, accuracy 0.2 % 0-±5 V, accuracy 0.2 % 0-±10 V accuracy 0.2 %
1.5mA-1A Inp/ Shunt Input		1 A input, mA: 1.5, 5, 15, 50, 150, 500, 1500 Shunt input, mV: 60, 60√10, 600, 600V√10, 6000, 6000√10 Input impedance: 60k
		1 A input: set scaling to 0.1 Shunt input: 60 mV corresponds to 1.0000 A

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Distributed by:

Infratek 106A Single- and Three Phase Power Analyzer

The **Infratek 106A** high precision broadband **Power Analyzer** has a wide current range 1mA-40A designed to offer the engineer the ability to measure low stand by power, power at low power factor of an idling transformer, or power of a frequency inverter driving a large motor.

Low Cost, High Performance

- Suitable for frequency inverter drivers
- Large and bright display for up to 10/40 values
- Scope function, Bar Charts, Harmonics 1-99
- DC-1MHz, 1.5 mA-40 A, 0.3 V-1000 V
- 0.1 % and 0.05 % accuracy
- IEEE-488, RS232, Analog outputs / inputs
- Windows Operating Software

The Infratek 106A high performance Power Analyzers are available as single- and three phase instruments. The 106A is designed to cope with the extreme signals generated on frequency inverter drivers and other electronically generated signals. You don't have to worry about the signal waveforms. The analyzers will always provide precise and reliable measurements.
The large and very bright monitor lets you read the display values from a distance of up to 4m.

Simple to use

From checking power of your coffee machine to determining the pertinent power parameters of a frequency inverter driven system is a simple task. You have all values displayed. In large letters by the way, well readable, even in dark rooms. The user menu makes operation easy. The measured values you can either print, send them to a PC via IEEE- or RS232 interface, or to a chart recorder via the analog outputs. You can have all available options installed in your instrument.

Extraordinary Features

Infratek has put much effort into the design of the 106A Power Analyzers to give you highest performance at low costs.
The analyzer inputs are all galvanically isolated, are broadband DC-1MHz, have a wide input range (0.3 V-1000 V, 1.5 mA-40 A), and have an 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 40 measured values on the screen.
The Windows operating software lets you configure all parameters of the instrument. The user sets the measured quantities he wants to read from the Power Analyzer, this includes for example, 8 analog inputs. Special software is available for motor- and transformer testing. Also, an extensive LabView driver is available.