



## 2801 and 2802 Advanced Power Analyzers

The 2801 and 2802 Advanced Single- and Two-Channel Power Analyzers combine an unprecedented feature set with an ideal combination of precision, speed and ease-of-use in an instrument so economical it can be on every bench.

With an extended measurement range from micro-amps to hundreds of amps and millivolts to kilovolts, the 2801 and 2802 are the ideal analyzers for standby power or Energy Star testing. In addition to numerical results, the 2801 and 2802 captures waveforms with true 512-point precision. Results and waveforms can be displayed, read via the communication ports, or sent directly at full resolution to a USB printer. Power and amplitude measurements with an accuracy of <math><0.1\%</math> are automatically synchronized to the fundamental frequency. Peak, rms, rectified, and DC measurements of voltage, current and power are provided including continuous, inrush, startup and history modes, plus an integration mode for W-Hr, A-Hr, VA-Hr, as well as integrated average power. (Channels can be operated synchronously or independently on the 2802) The 2801 and 2802 also provide waveform peak and glitch capture modes.

### Quality and Reliability

XITRON Technologies, founded in 1990, is the premier source of precision power testing and measuring equipment for industrial and consumer product development and manufacturing. XITRON's sophisticated technology provides companies the edge in design verification and product manufacturability. XITRON is ISO9001-2000 certified, EN46001 registered and FDA (GMP820) compliant.

- » Highest Performance-to-Cost ratio in the industry
- » Up to 2000V peak and 150A peak measurable internally (external CT capable)
- » Two channels for independent or synchronous measurements, including input/output efficiency and loss (2802 only)
- » Base accuracy <math><0.08\%</math>. Current and voltage accuracies specified to less than 1mArms and 1Vrms respectively (<math><0.2\%</math>)
- » Measures and displays volts, current, power, frequency, harmonics (to the 100th), THD, PF, CF, K-Factor, Triplens, inrush, distortion, glitches, and much more
- » Provides PASS/FAIL tests to user limits\*
- » Integrated line switch and inrush waveforms
- » Source or load measurements with wiring loss and voltage burden compensation
- » DC charge and discharge measurements
- » Frequency Range: DC and 20mHz – 200kHz
- » Graphics display shows numerical results, waveforms, bar graphs, startup & history charts with zoom & scroll features
- » 16-bit A/D converters at 235ksps
- » 12 User-configurable digital I/O
- » USB Flash drive support for data logging\*
- » Communications interfaces include GPIB (IEEE488), RS-232, USB (host and device), and Ethernet\*\*
- » Suitable for AC, DC, 1-phase 3-wire, 2-phase 3-wire†, 3-phase 3-wire†, in/out synchronous†, or independent measurements (†2802 only).



### XITRON XVIEW Software

While all XITRON precision test equipment is designed to be used in a completely stand-alone manner, there are times when external tools can aid or enhance the operation of an instrument. XView software tools and drivers are designed to help easily configure an instrument from a single screen, or are used to view a complete set of measurements in a single screen. Other XView tools are designed for data collection where results can be recorded in an Excel-compatible file for post-processing, insertion into reports, or simply for archival purposes.

These precompiled applications can be downloaded from the XITRON web site at [www.xitrontech.com/support.html](http://www.xitrontech.com/support.html). Often, XITRON can provide the source code for a particular application, and it can be used as a convenient 'starting point' for a custom software application.

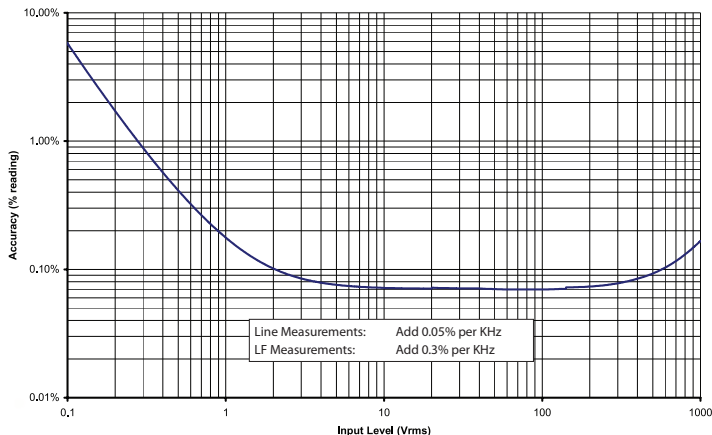


2801

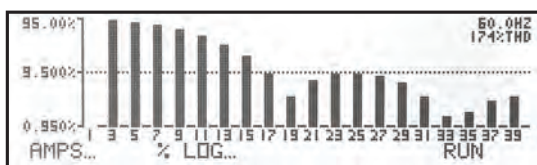
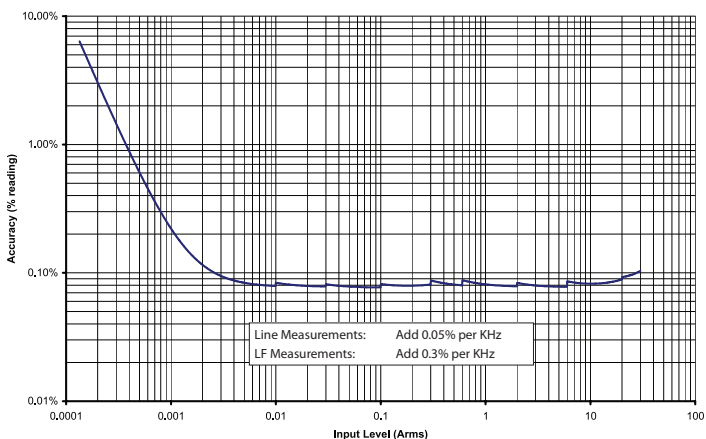


2802

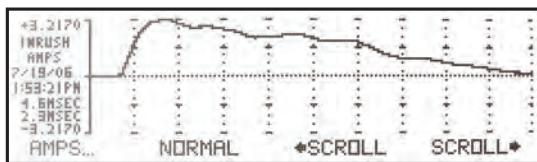
1 year Specification, AC Voltage, Autorange, CF <1.5, Line or LF Measurements



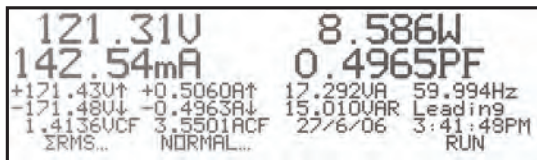
1 year Specification, AC Current, Autorange, CF <2.5, Line or LF Measurements



Current, Voltage and Power Harmonics Barcharts (to 100th)



Current and Voltage Inrush Charts



Numerics Results Screens

## CONDENSED SPECIFICATIONS

Accuracy specifications valid for 1 year for ambient temperatures within 5° C of calibration temperature. (Contact XiTRON for complete specifications.)

### VOLTAGE RANGE (MEASURABLE)

2000Vpk (850Vrms) max. continuous

### INTERNAL CURRENT RANGE (MEASURABLE)

150Apk (30Arms) max. continuous

### EXTERNAL CURRENT TRANSDUCERS (MEASURABLE)

35Vpk (15Vrms) max. continuous

### VOLTAGE AND CURRENT ACCURACY

See charts to the left.

### FREQUENCY MEASUREMENT ACCURACY

0.005%

### CREST FACTOR ACCURACY

V: (50mV + 0.01% of pk rng)/RMS value

A: (50uA + 0.01% of pk rng)/RMS value

### HARMONIC ACCURACY (VOLTAGE & CURRENT)

0.02%

### WAVEFORMS

Actual, Peak Capture, Distortion, and Glitch capture

### CHARTS, WITH ZOOM AND SCROLL

History, Startup and Inrush

### LINE SWITCH

Max Open Voltage: 720Vpk (480Vrms)

Max Surge Current: TBD

Max On Current: 10Arms

Turn On Phase: 1° resolution

### DIGITAL INTERFACES

GPIO (IEEE-488), USB (host and device), RS-232, Digital IO, Ethernet\* (\*planned)

### PHYSICAL

Power Input: 12VDC @ 1.5A minimum output

Size: (HxWxD) 4.7"x 13.8"x 9.5"  
(11.94cm x 35.05cm x 24.13cm)

Weight: 7.5 lbs (3.4 kg)

Operating Range: 0°C to 55°C, <95% RH non-condensing

Storage Range: -20°C to 70°C <95% RH non-condensing

Unit is supplied with one XiTRON Technologies T5 universal external power supply, 100-240Vrms, 50-60Hz, with a 2.5mm 12VDC output plug and a three prong IEC320 AC inlet receptacle, plus a three-prong AC power cord.

### WARRANTY

Two years