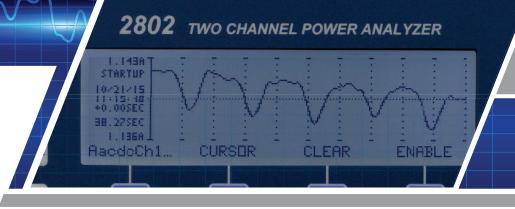


2801 & 2802 Series

**1- and 2-Channel 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.

Vitrek, founded in 1990, is the premier source of precision power testing and measuring equipment for industrial and consumer product development and manufacturing.

Vitrek's sophisticated technology provides companies the edge in

design verification and product

manufacturability. Vitrek is ISO 17025 Accredited.

Quality and Reliability

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 <0.1% 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.

- > 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 <0.08%. Current and voltage accuracies specified to less than 1mArms and 1Vrms respectively (<0.2%)</p>
- Measures and displays volts, current, power, frequency, harmonics (to the 100th), THD, PF, CF, K-Factor, Triplens, inrush, distortion, glitches, and much more
- > Integrated line switch and inrush waveforms

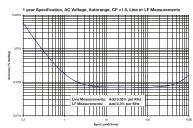
- > Source or load measurements with wiring loss and voltage burden compensation
- > DC charge and discharge measurements
- > Frequency Range: DC and 20mHz 200kHz
- Scraphics display shows numerical results, waveforms, bar graphs, startup & history charts with zoom & scroll features
- > 16-bit A/D converters 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)
- > Suitable for AC, DC, 1-phase 3-wire, 2-phase 3-wire, 3-phase 3-wire, in out synchronous, or independent measurements (2802 only).

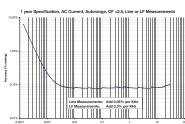
25
Years Industry
EXPERTISE

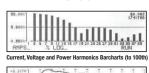
# **INDUSTRIES SERVED**

- Automated Production Testing
   Ballast Testing
   Consumer Products
   Engineering Labs
- Instrument Maintenance & Repair Peak Power & Consumption Measurements
- Product Compliance Testing
   Test Labs











121.31U 8.586U 142.54mA 0.4965PF 121.4301 +0.505081 12.2320 5.4394Hz 141.500F 3.55080F 2.2320 5.4439H 22835 MIGRAIL



Vitrek 12169 Kirkham Road Poway, CA 92064 (858) 689-2755 info@vitrek.com www.Vitrek.com

# **Condensed Specifications**

Accuracy specifications valid for 1 year for ambient temperatures within 5° C of calibration temperature.

(Contact Vitrek 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**

GPIB (IEEE-488), USB (host and device),

RS-232, Digital IO

### **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:**  $-20^{\circ}\text{C}$  to  $70^{\circ}\text{C} < 95\%$  RH

non-condensing

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

#### WARRANTY

Two years

ORDERING INFORMATION	
PART#	DESCRIPTION
2801	Single Channel Advanced Power
2802	Two Channel Advanced Power Analyzer
280X OPT ON	Power ON Option
280X OPT LOG	280X Data Logging
280X CABLE IEC	280x Connection Cable, 4ft, IEC 5-15
280X CABLE NEMA 6-20 P/R	280x Connection Cable, 4ft, NEMA 6-20
280X CABLE NEMA L6-20	280x Connection Cable, 10ft, NEMA L6-20
280X-CABLE WAGO	280x Connection Cable, 6ft, WAGO
UG280X	Additional Operating Manual Set
RB-255X	Rack Mount Adapter
RB-255X-BLK	Rack Mount Adapter (Black)
RB-255XFL	Rack Mount Adapter - Flush Mount

Please visit www.vitrek.com for ordering information.

