

# SR830 DSP Lock-In Amplifier

## DISPLAYS

Channel 1	4 1/2 digit LED display with 40 segment LED bar graph. X, R, X Noise, Aux Input 1 or 2. The display can also be any of these quantities divided by Aux Input 1 or 2.
Channel 2	4 1/2 digit LED display with 40 segment LED bar graph. Y, $\theta$ , Y Noise, Aux Input 3 or 4. The display can also be any of these quantities divided by Aux Input 3 or 4.
Offset	X, Y and R may be offset up to $\pm 105\%$ of full scale.
Expand	X, Y and R may be expanded by 10 or 100.
Reference	4 1/2 digit LED display. Display and modify reference frequency or phase, sine output amplitude, harmonic detect, offset percentage (X, Y or R), or Aux Outputs 1-4.
Data Buffer	16k points from both Channel 1 and Channel 2 display may be stored internally. The internal data sample rate ranges from 512 Hz down to 1 point every 16 seconds. Samples can also be externally triggered. The data buffer is accessible only over the computer interface.

## INPUTS AND OUTPUTS

Channel 1 Output	Output proportional to Channel 1 display, or X. Output Voltage: $\pm 10$ V full scale. 10 mA max output current.
Channel 2 Output	Output proportional to Channel 2 display, or Y. Output Voltage: $\pm 10$ V full scale. 10 mA max output current.
X and Y Outputs	Rear panel outputs of cosine (X) and sine (Y) components. Output Voltage: $\pm 10$ V full scale. 10 mA max output current.
Aux. Outputs	4 BNC Digital to Analog outputs. $\pm 10.5$ V full scale, 1 mV resolution. 10 mA max output current.
Aux. Inputs	4 BNC Analog to Digital inputs. Differential inputs with $1\text{ M}\Omega$ input impedance on both shield and center conductor. $\pm 10.5$ V full scale, 1 mV resolution.
Trigger Input	TTL trigger input triggers stored data samples.
Monitor Output	Analog output of signal amplifiers (before the demodulator).

## GENERAL

Interfaces	IEEE-488 and RS232 interfaces standard. All instrument functions can be controlled through the IEEE-488 and RS232 interfaces.
Preamp Power	Power connector for SR550 and SR552 preamplifiers.
Power	40 Watts, 100/120/220/240 VAC, 50/60 Hz.
Dimensions	17"W x 5.25"H x 19.5"D
Weight	30 lbs.
Warranty	One year parts and labor on materials and workmanship.