



### ULTRA LOW NOISE TRANSIMPEDANCE AMPLIFIER

- ULTRA LOW NOISE - DOWN TO  $7\text{fA}/\sqrt{\text{Hz}}$
- HIGH GAIN - UP TO  $1\text{GV/A}$
- BANDWIDTH - FROM  $120\text{Hz}$  TO  $2\text{MHz}$
- ACCEPTS CURRENT SOURCE INPUTS



### DESCRIPTION:

The **311 Series** are state-of-the-art precision amplifiers designed for current source input applications in which high gain and low noise are required.

### SPECIFICATIONS:

#### Input

Impedance Virtual ground, AC coupled  
Capacitance See graphs on reverse for performance vs. capacitance. Indicate value of input capacitance (add - \_\_\_pF to part number)

#### Output

Load  $\geq 50\Omega$   
Swing  $16\text{V}$  pk-pk into  $1\text{k}\Omega$   
 $7\text{V}$  pk-pk into  $50\Omega$  (-1 and -2)  
 $12\text{V}$  pk-pk into  $50\Omega$  (-3 and -4)

#### Gain

Trimpot adjustable (-3 and -4)

#### Polarity

Inverting (add -INV to part number)  
Non-Inverting (add -NI to part number)

#### Power

$\pm 15\text{VDC}$  at  $30\text{mA}$  typical (no load)

#### Temperature

$0^\circ$  to  $70^\circ\text{C}$

#### Connections

Input Pins  
Output BNC  
Power Filter feed-thru pins and ground lug  
Bias Pin decoupled with  $0.1\mu\text{F}$ ,  $100\text{V}$  capacitor. (See table on reverse.)

#### Size Weight

$3.12" \times 1.50" \times 1.09"$   
 $3.2$  ounces

Specifications subject to change without notice.



### APPLICATIONS:

*Ultra Low Noise, Low and Medium Bandwidth Transimpedance Amplifier for Detectors and Transducers*

