


SP Amp DIFF AMP Single $\pm 18V$ 8-Pin SOIC N T/R

Manufacturer:	Analog Devices, Inc
Package/Case:	SOP8
Product Type:	Amplifier ICs
RoHS:	RoHS Compliant/Lead free 
Lifecycle:	Active



Images are for reference only

[Inquiry](#)

General Description

The AD629 is a difference amplifier with a very high input, common-mode voltage range. It is a precision device that allows the user to accurately measure differential signals in the presence of high common-mode voltages up to ± 270 V.

The AD629 can replace costly isolation amplifiers in applications that do not require galvanic isolation. The device operates over a ± 270 V common-mode voltage range and has inputs that are protected from common-mode or differential mode transients up to ± 500 V.

The AD629 has low offset, low offset drift, low gain error drift, low common-mode rejection drift, and excellent CMRR over a wide frequency range.

The AD629 is available in low cost, 8-lead PDIP and 8-lead SOIC packages. For all packages (including die) and grades, performance is guaranteed over the industrial temperature range of -40°C to $+85^{\circ}\text{C}$.

Key Features

Improved replacement for: INA117P and INA117KU

Input protection to ± 500 V common mode ± 500 V differential mode Wide power supply range (± 2.5 V to ± 18 V) ± 10 V output swing on ± 12 V supply 1 mA maximum power supply current

HIGH ACCURACY DC PERFORMANCE 3 ppm maximum gain nonlinearity (AD629B) $20 \mu\text{V}/^{\circ}\text{C}$ maximum offset drift (AD629A) $10 \mu\text{V}/^{\circ}\text{C}$ maximum offset drift (AD629B) 10 ppm/ $^{\circ}\text{C}$ maximum gain drift

EXCELLENT AC SPECIFICATIONS 77 dB minimum CMRR @ 500 Hz (AD629A) 86 dB minimum CMRR @ 500 Hz (AD629B) 500 kHz bandwidth

Application

High voltage current sensing

Battery cell voltage monitors

Power supply current monitors

Motor controls

Isolation

Recommended For You

AD8309ARUZ

Analog Devices, Inc
TSSOP16

AD524BDZ

Analog Devices, Inc
CDIP-16

AD8221BR

Analog Devices, Inc
SOP-8

AD8221ARZ

Analog Devices, Inc
SOP8

AD627BRZ

Analog Devices, Inc
SOP8

AD622ANZ

Analog Devices, Inc
DIP8

ADA4930-2YCPZ-R7

Analog Devices, Inc
LFCSP24

AD8034ARZ

Analog Devices, Inc
SOP8

AD8561ARZ

Analog Devices, Inc
SOP8

AD633JRZ

Analog Devices, Inc
SOP8

AD632AH

Analog Devices, Inc
CAN10

AD8422BRZ

Analog Devices, Inc
SOP8

ADCMP600BKSZ-R2

Analog Devices, Inc
SC70-5

AD620BN

Analog Devices, Inc
DIP8

AD620BR

Analog Devices, Inc
SOP