

Operational Amplifier, Rail to Rail Output, 2 Amplifier, 1.8 MHz, 3 V/ $\mu$ s, 5V to 30V,  $\pm 2.5V$  to  $\pm 15V$

Manufacturers	<a href="#">Analog Devices, Inc</a>
Package/Case	SOIC-8
Product Type	Amplifier ICs
RoHS	Pb-free Halide free
Lifecycle	



Images are for reference only

Please submit RFQ for AD822ARZ-REEL7 or [Email to us: sales@ovaga.com](mailto:sales@ovaga.com) We will contact you in 12 hours.

[RFQ](#)

## General Description

The AD8222 is a dual-channel, high performance instrumentation amplifier that requires only one external resistor per amplifier to set gains of 1 to 10,000.

The AD8222 is the first dual-instrumentation amplifier in the small 4 mm  $\times$  4mm LFCSP. It requires the same board area as a typical single instrumentation amplifier. The smaller package allows a 2 $\times$  increase in channel density and a lower cost per channel, all with no compromise in performance.

The AD8222 can also be configured as a single-channel, differential output instrumentation amplifier. Differential outputs provide high noise immunity, which can be useful when the output signal must travel through a noisy environment, such as with remote sensors. The configuration can also be used to drive differential input analog-to-digital converters (ADCs). The AD8222 maintains a minimum CMRR of 80 dB to 4 kHz for all grades at = 1.

The AD8222 operates on both single and dual supplies and only requires 2.2 mA maximum supply current for both amplifiers. It is specified over the industrial temperature range of  $-40^{\circ}C$  to  $+85^{\circ}C$  and is fully RoHS compliant.

For a single-channel version, see the AD8221.

## Features

Two channels in small 4 mm × 4 mm LFCSP

Gain set with 1 resistor per amplifier>

Low noise

8 nV/ $\sqrt{\text{Hz}}$  at 1 kHz

0.25  $\mu\text{V}$  p-p (0.1 Hz to 10 Hz)

High accuracy dc performance (B grade)

60  $\mu\text{V}$  maximum input offset voltage

0.3  $\mu\text{V}/^\circ\text{C}$  maximum input offset drift

1.0 nA maximum input bias current

126 dB minimum CMRR>

Excellent ac performance

140 kHz bandwidth>

13  $\mu\text{s}$  settling time to 0.001%

Differential output option (single channel)

Fully specified

Adjustable common-mode output

Supply range:  $\pm 2.3$  V to  $\pm 18$  V

Available As Known Good Die and fully guaranteed to data sheet specifications

## Application

Multichannel data acquisition for

ECG and medical instrumentation

Industrial process controls

Wheatstone bridge sensors

Differential drives for

High resolution input ADCs

Remote sensors

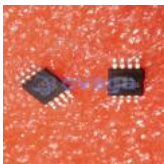


### Related Products



[AD8418BRMZ-RL](#)

Analog Devices, Inc  
MSOP-8



[ADA4084-2ARMZ](#)

Analog Devices, Inc  
MSOP-8



[ADA4528-2ARMZ-R7](#)

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[AD8062ARMZ](#)

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[AD8567ARUZ](#)

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