

Instrument Amplifier, 3 Amplifier, 200  $\mu$ V, 1 V/ $\mu$ s, 2.5 kHz, 2.7V to 36V,  $\pm$  2.7V to  $\pm$  18V, MSOP

Manufacturers	<u>Analog Devices, Inc</u>
Package/Case	MSOP-8
Product Type	Amplifier ICs
RoHS	Pb-free Halide free
Lifecycle	



Images are for reference only

Please submit RFQ for AD8420ARMZ or [Email to us: sales@ovaga.com](mailto:sales@ovaga.com) We will contact you in 12 hours.

[RFQ](#)

## General Description

The AD8420 is a low cost, micropower, wide supply range, instrumentation amplifier with a rail-to-rail output and a novel architecture that allows for extremely flexible design. It is optimized to amplify small differential voltages in the presence of large common-mode signals.

The AD8420 is based on an indirect current feedback architecture that gives it an excellent input common-mode range. Unlike conventional instrumentation amplifiers, the AD8420 can easily amplify signals at or even slightly below ground without requiring dual supplies. The AD8420 has rail-to-rail output, and the output voltage swing is completely independent of the input common-mode voltage.

Single-supply operation, micropower current consumption, and rail-to-rail output swing make the AD8420 ideal for battery-powered applications. Its rail-to-rail output stage maximizes dynamic range when operating from low supply voltages. Dual-supply operation ( $\pm$ 15 V) and low power consumption make the AD8420 ideal for a wide variety of applications in medical or industrial instrumentation.

The AD8420 is available in an 8-lead MSOP package. Performance is specified over the full temperature range of  $-40^{\circ}\text{C}$  to  $+85^{\circ}\text{C}$ , and the part is operational from  $-40^{\circ}\text{C}$  to  $+125^{\circ}\text{C}$

## Features

Maximum supply current: 90  $\mu$ A

Minimum CMRR: 100 dB

Drives heavy capacitive loads:  $\sim$ 700 pF

Rail-to-rail output

Input voltage range goes below ground

Gain set with 2 external resistors Can achieve low gain drift at any gain

Very wide power supply range Single supply: 2.7 V to 36 V Dual supply:  $\pm$ 2.7 V to  $\pm$ 18 V

Bandwidth >

Input voltage noise: 55 nV/ $\sqrt$ Hz

See data sheet for additional features

## Application

Bridge amplifiers

Pressure Measurement

Medical instrumentation

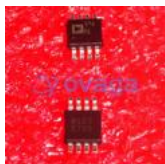
Portable data acquisition

Multichannel systems



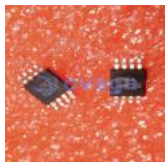


### Related Products



#### [AD8418BRMZ-RL](#)

Analog Devices, Inc  
MSOP-8



#### [ADA4084-2ARMZ](#)

Analog Devices, Inc  
MSOP-8



#### [AD8567ARUZ](#)

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#### [ADA4528-2ARMZ-R7](#)

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