

INST Amp Single R-R O/P $\pm 6V/12V$ 8-Pin SOIC N Tube**Manufacturer:** [Analog Devices, Inc](#)**Package/Case:** SOP**Product Type:** Amplifier ICs**Lifecycle:** Obsolete

Images are for reference only

[Inquiry](#)**General Description**

The AD623 is an integrated, single- or dual-supply instrumentation amplifier that delivers rail-to-rail output swing using supply voltages from 3 V to 12 V. The AD623 offers superior user flexibility by allowing single gain set resistor programming and by conforming to the 8-lead industry standard pinout configuration. With no external resistor, the AD623 is configured for unity gain ($G = 1$), and with an external resistor, the AD623 can be programmed for gains of up to 1000.

The superior accuracy of the AD623 is the result of increasing a common-mode rejection ratio (CMRR) coincident with increasing gain; line noise harmonics are rejected due to constant CMRR up to 200 Hz. The AD623 has a wide input common-mode range and amplifies signals with common mode voltages as low as 150 mV below ground. The AD623 maintains superior performance with dual and single polarity power supplies.

Key Features

Easy to use

Rail-to-rail output swing

Input voltage range extends 150 mV below ground (single supply)

Low power, 550 μ A maximum supply current

Gain set with one external resistor

Gain range: 1 to 1000

High accuracy dc performance

0.10% gain accuracy ($G = 1$)

0.35% gain accuracy ($G > 1$)

Noise: 35 nV/ $\sqrt{\text{Hz}}$ RTI noise at 1 kHz

Excellent dynamic specifications

800 kHz bandwidth ($G = 1$)

20 μ s settling time to 0.01% ($G = 10$)

Application

Low power medical instrumentation

Transducer interfaces

Thermocouple amplifiers

Industrial process controls

Difference amplifiers

Low power data acquisition

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

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