


INST Amp Single $\pm 18V$ 8-Pin SOIC N T/R

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



Images are for reference only

[Inquiry](#)

General Description

The AD620 is a low cost, high accuracy instrumentation amplifier that requires only one external resistor to set gains of 1 to 10,000. Furthermore, the AD620 features 8-lead SOIC and DIP packaging that is smaller than discrete designs and offers lower power (only 1.3 mA max supply current), making it a good fit for battery powered, portable (or remote) applications.

The AD620, with its high accuracy of 40 ppm maximum nonlinearity, low offset voltage of 50 μV max, and offset drift of 0.6 $\mu V/^\circ C$ max, is ideal for use in precision data acquisition systems, such as weigh scales and transducer interfaces. Furthermore, the low noise, low input bias current, and low power of the AD620 make it well suited for medical applications such as ECG and noninvasive blood pressure monitors.

The low input bias current of 1.0 nA max is made possible with the use of Super β processing in the input stage. The AD620 works well as a preamplifier due to its low input voltage noise of 9 nV/ \sqrt{Hz} at 1 kHz, 0.28 μV p-p in the 0.1 Hz to 10 Hz band, and 0.1 pA/ \sqrt{Hz} input current noise. Also, the AD620 is well suited for multiplexed applications with its settling time of 15 μs to 0.01%, and its cost is low enough to enable designs with one in-amp per channel.

Key Features

EASY TO USE Gain Set with One External Resistor (Gain Range 1 to 10,000) Wide Power Supply Range ($\pm 2.3 V$ to $\pm 18 V$) Higher Performance than Three Op Amp IA Designs Available in 8-Lead DIP and SOIC Packaging Low Power, 1.3 mA max Supply

LOW NOISE 9 nV/ \sqrt{Hz} , @ 1 kHz, Input Voltage Noise 0.28 μV p-p Noise (0.1 Hz to 10 Hz)

EXCELLENT DC PERFORMANCE (B GRADE) 50 μV max, Input Offset Voltage 0.6 $\mu V/^\circ C$ max, Input Offset Drift 1.0 nA max, Input Bias Current 100 dB min Common-Mode Rejection Ratio >

EXCELLENT AC SPECIFICATIONS 120 kHz Bandwidth >

Application

Weigh scales

ECG and medical instrumentation

Transducer interface

Data acquisition systems

Industrial process controls

Battery-powered and portable equipment

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

LFCS24

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