


INST Amp Single $\pm 18V$ 8-Pin SOIC N Tube

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 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

Low noise and low input bias current

Wide power supply range from $\pm 2.3V$ to $\pm 18V$

Higher performance than 3 op amp IA designs

Excellent DC performance

Small signal -3dB bandwidth of 1MHz at $G = 1$

Input offset voltage of 30 μV

Input bias current of 0.5nA

Input voltage noise is 9nV/ \sqrt{Hz} at 1KHz

Operating temperature range from $-40^\circ C$ to $85^\circ C$

Application

Weigh scales

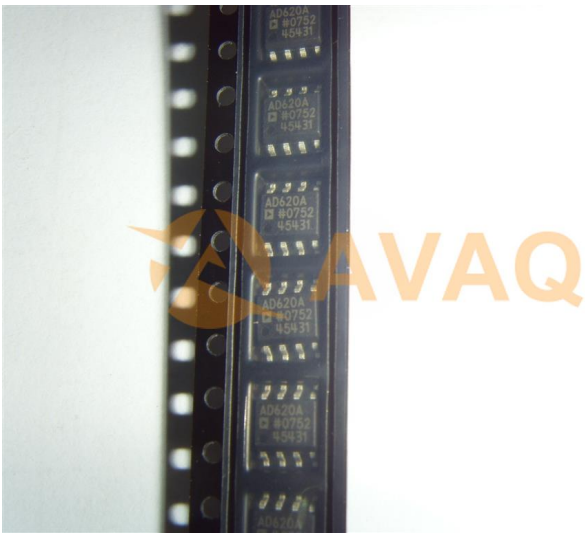
ECG and medical instrumentation

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
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