

## INST Amp Single ±18V 8-Pin SOIC N T/R

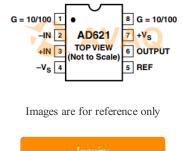
Manufacturer: Analog Devices, Inc

Package/Case: SOP

**Product Type:** Amplifier ICs

RoHS: RoHS Compliant/Lead free RoHS

**Lifecycle:** Active



## **General Description**

The AD621 is an easy to use, low cost, low power, high accuracy instrumentation amplifier which is ideally suited for a wide range of applications. Its unique combination of high performance, small size and low power, outperforms discrete in amp implementations. High functionality, low gain errors and low gain drift errors are achieved by the use of internal gain setting resistors. Fixed gains of 10 and 100 can be easily set via external pin strapping. The AD621 is fully specified as a total system, therefore, simplifying the design process.

For portable or remote applications, where power dissipation, size and weight are critical, the AD621 features a very low supply current of 1.3 mA max and is packaged in a compact 8-pin SOIC, 8-pin plastic DIP or 8-pin cerdip. The AD621 also excels in applications requiring high total accuracy, such as precision data acquisition systems used in weigh scales and transducer interface circuits. Low maximum error specifications including nonlinearity of 10 ppm, gain drift of 5 ppm $^{\circ}$ /C, 50  $\mu$ V offset voltage and 0.6 mV/ $^{\circ}$ C offset drift ("B" grade), make possible total system performance at a lower cost than has been previously achieved with discrete designs or with other monolithic instrumentation amplifiers.

When operating from high source impedances, as in ECG and blood pressure monitors, the AD621 features the ideal combination of low noise and low input bias currents. Voltage noise is specified as 9 nV/(root) Hz at 1 kHz and 0.28  $\mu$ V p-p from 0.1 Hz to 10 Hz. Input current noise is also extremely low at 0.1 pA/Hz. The AD621 outperforms FET input devices with an input bias current specification of 1.5 nA max over the full industrial temperature range.

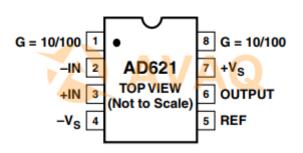
## **Key Features**

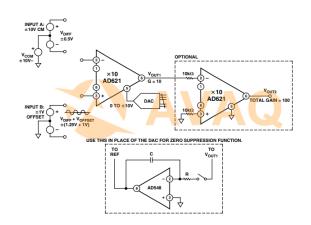
Easy To UsePin-Strappable Gains of 10 and 100All Errors Specified for Total System PerformanceHigh Performance than Discrete In Amp DesignsAvailable in 8-Lead DIP and SOICLow Power, 1.3 mA Max Supply CurrentWide Power Supply

Low Noise9 nV/vHz, @ 1 kHz, Input Voltage Noise0.28 μV p-p Noise (0.1 Hz to 10 Hz)

 $Excellent\ DC\ Performance 0.15\%\ Max,\ Total\ Gain\ Error \pm 5\ ppm/^{\circ}C,\ Total\ Gain\ Drift 125\ \mu V\ Max,\ Total\ Offset\ Voltage 1.0\ \mu V/^{\circ}C\ Max,\ Offset\ Voltage\ Drift$ 

Excellent AC Specifications 800 kHz Bandwidth = 100)12 µs Settling Time to 0.01%





## **Recommended For You**

AD8309ARUZ AD524BDZ AD8221BR

Analog Devices, Inc Analog Devices, Inc Analog Devices, Inc

TSSOP16 CDIP-16 SOP-8

AD8221ARZ AD627BRZ AD622ANZ

Analog Devices, Inc Analog Devices, Inc Analog Devices, Inc

SOP8 SOP8 DIP8

ADA4930-2YCPZ-R7 AD8034ARZ AD8561ARZ

Analog Devices, Inc Analog Devices, Inc Analog Devices, Inc

LFCSP24 SOP8 SOP8

AD633JRZ AD632AH AD8422BRZ

Analog Devices, Inc Analog Devices, Inc Analog Devices, Inc

SOP8 CAN10 SOP8

ADCMP600BKSZ-R2 AD620BN AD620BR

Analog Devices, Inc Analog Devices, Inc Analog Devices, Inc

SC70-5 DIP8 SOP