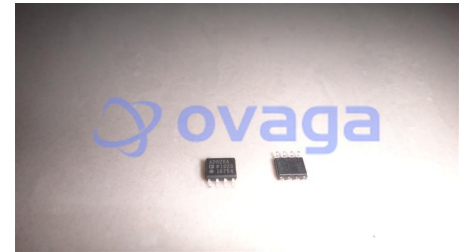


Programmable/Variable Amplifier, 1 Channels, 2 Amplifier, 600 kHz, -40 °C, 85 °C, ± 2.25V to ± 18V

| | |
|---------------|-------------------------------------|
| Manufacturers | Analog Devices, Inc |
| Package/Case | SOIC-8 |
| Product Type | Amplifier ICs |
| RoHS | Pb-free Halide free |
| Lifecycle | |



Images are for reference only

Please submit RFQ for AD628ARZ or [Email to us: sales@ovaga.com](mailto:sales@ovaga.com) We will contact you in 12 hours.

[RFQ](#)

General Description

The AD628 is a precision difference amplifier that combines excellent dc performance with high common-mode rejection over a wide range of frequencies. When used to scale high voltages, it allows simple conversion of standard control voltages or currents for use with single-supply ADCs. A wideband feedback loop minimizes distortion effects due to capacitor charging of Σ - Δ ADCs.

A reference pin (VREF) provides a dc offset for converting bipolar to single-sided signals. The AD628 converts +5 V, +10 V, ±5 V, ±10 V, and 4 to 20 mA input signals to a single-ended output within the input range of single-supply ADCs.

The AD628 has an input common mode and differential mode operating range of ±120 V. The high common mode, input impedance makes the device well suited for high voltage measurements across a shunt resistor. The inverting input of the buffer amplifier is available for making a remote Kelvin connection.

A precision 10 k Ω resistor connected to an external pin is provided for either a low-pass filter or to attenuate large differential input signals. A single capacitor implements a low-pass filter. The AD628 operates from single and dual supplies and is available in an 8-lead SOIC_N or an 8-lead MSOP. It operates over the standard industrial temperature range of -40°C to +85°C.

Features

High common-mode input voltage range ± 120 V at >

Gain range 0.1 to 100

Operating temperature range: -40°C to $+85^{\circ}\text{C}$

Supply voltage range Dual supply: ± 2.25 V to ± 18 V Single supply:
4.5 V to 36 V

Excellent ac and dc performance

Offset temperature stability RTI: $10\ \mu\text{V}/^{\circ}\text{C}$ maximum

Offset: ± 1.5 V mV maximum

CMRR RTI: 75 dB minimum, dc to 500 >

Application

High voltage current shunt sensing

Programmable logic controllers

Analog input front end signal conditioning +5 V, +10 V, ± 5 V, ± 10 V, and
4 to 20 mA

Isolation Sensor signal conditioning

Power supply monitoring

Electrohydraulic controls

Motor controls



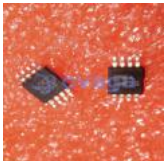


Related Products



[AD8418BRMZ-RL](#)

Analog Devices, Inc
MSOP-8



[ADA4084-2ARMZ](#)

Analog Devices, Inc
MSOP-8



[AD8567ARUZ](#)

Analog Devices, Inc
TSSOP-14



[AD8022ARMZ](#)

Analog Devices, Inc
MSOP-8



[ADA4528-2ARMZ-R7](#)

Analog Devices, Inc
MSOP-8



[AD8062ARMZ](#)

Analog Devices, Inc
MSOP8



[AD8628AUJZ](#)

Analog Devices, Inc
SOP23



[AD8041AR](#)

Analog Devices, Inc
SOP-8