

LINEAR TECHNOLOGY LT1990ACS8#PBF Differential Amplifier, Micropower, 1 Amplifiers, 5.2mV, 10dB, 100kHz, -40°C, 85°C

Manufacturers	Analog Devices, Inc
Package/Case	SOP8
Product Type	Amplifier ICs
RoHS	Green
Lifecycle	



Images are for reference only

Please submit RFQ for LT1990ACS8#PBF or [Email to us: sales@ovaga.com](mailto:sales@ovaga.com) We will contact you in 12 hours.

[RFQ](#)

General Description

The LT1990 is a micropower precision difference amplifier with a very high common mode input voltage range. It has pin selectable gains of 1 or 10. The LT1990 operates over a $\pm 250V$ common mode voltage range on a $\pm 15V$ supply. The inputs are fault protected from common mode voltage transients up to $\pm 350V$ and differential voltages up to $\pm 500V$. The LT1990 is ideally suited for both high side and low side current or voltage monitoring.

On a single 5V supply, the LT1990 has an adjustable 85V input range, 70dB min CMRR and draws less than 120 μA supply current. The rail-to-rail output maximizes the dynamic range, especially important for single supplies as low as 2.7V.

The LT1990 is specified for single 3V, 5V and $\pm 15V$ supplies over both commercial and industrial temperature ranges. The LT1990 is available in the 8-pin SO package.

Features

Pin Selectable Gain of 1 or 10

High Common Mode Voltage Range:

85V Window>

Common Mode Rejection Ratio: 70dB Min

Input Protection to $\pm 350V$

Gain Error: 0.28% Max

PSRR: 82dB Min

High Input Impedance: $2M\Omega$ Differential, $500k\Omega$ Common Mode

Micropower: $120\mu A$ Max Supply Current

Wide Supply Range: 2.7V to 36V

Rail-to-Rail Output

8-Pin SO Package

Application

Battery Cell Voltage Monitoring

High Voltage Current Sensing

Signal Acquisition in Noisy Environments

Input Protection

Fault Protected Front Ends

Level Sensing

Isolation



Related Products



[LTC1151CSW#PBF](#)

Analog Devices, Inc
SOIC-16



[LT1498CS8](#)

Analog Devices, Inc
SOP-8



[LTC2053CMS8](#)

Analog Devices, Inc
MSOP8



[LTC1150CN8](#)

Analog Devices, Inc
DIP8



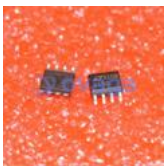
[LT1491ACS](#)

Analog Devices, Inc
SOP14



[LT6105IMS8](#)

Analog Devices, Inc
MSOP-8



[LTC1150CS8](#)

Analog Devices, Inc
SOP8



[LT1013CN8](#)

Analog Devices, Inc
DIP-8