

Operational Amplifier, Single, 1 Amplifier, 1.8 MHz, 3 V/ μ s, $\pm 2.5V$ to $\pm 15V$, SOIC, 8 Pins

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 AD820BRZ or [Email to us: sales@ovaga.com](mailto:sales@ovaga.com) We will contact you in 12 hours.

[RFQ](#)

General Description

Offset voltage of 800 μ V maximum, offset voltage drift of 2 μ V/ $^{\circ}$ C, typical input bias currents below 25 pA, and low input voltage noise provide dc precision with source impedances up to 1 G Ω . 1.8 MHz unity gain bandwidth, -93 dB THD at 10 kHz, and 3 V/ μ s slew rate are provided for a low supply current of 800 μ A. The AD820 drives up to 350 pF of direct capacitive load and provides a minimum output current of 15 mA. This allows the amplifier to handle a wide range of load conditions. This combination of ac and dc performance, plus the outstanding load drive capability, results in an exceptionally versatile amplifier for the single-supply user.

The AD820 is available in two performance grades. The A and B grades are rated over the industrial temperature range of -40 $^{\circ}$ C to +85 $^{\circ}$ C. The AD820 is offered in three 8-lead package options: plastic DIP (PDIP), surface mount (SOIC) and (MSOP).

Features

True single-supply operation
Output swings rail-to-rail
Input voltage range extends below ground
Single-supply capability from 5 V to 36 V
Dual-supply capability from ± 2.5 V to ± 18 V

Excellent load drive
Capacitive load drive up to 350 pF
Minimum output current of 15 mA

Excellent ac performance for low power
800 μ A maximum quiescent current
Unity-gain bandwidth: 1.8 MHz
Slew rate of 3 V/ μ s

Excellent dc performance
800 μ V maximum input offset voltage
2 μ V/ $^{\circ}$ C typical offset voltage drift
25 pA maximum input bias current

Low noise: 13 nV/ $\sqrt{\text{Hz}}$ @ 10 kHz

Application

Battery-powered precision instrumentation

Photodiode preamps

Active filters

12-bit to 14-bit data acquisition systems

Medical instrumentation

Low power references and regulators

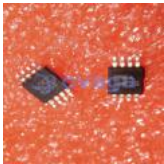
Data Sheet, Rev. F, 11/08

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