

Operational Amplifier, Rail-to-Rail O/P, 2 Amplifier, 85 kHz, 0.03 V/ $\mu$ s, 3V to 36V, NSOIC, 8 Pins

Manufacturers	<a href="#">Analog Devices, Inc</a>
Package/Case	SOP-8
Product Type	Amplifier ICs
RoHS	Rohs
Lifecycle	



Images are for reference only

Please submit RFQ for OP295GSZ-REEL7 or [Email to us: sales@ovaga.com](mailto:sales@ovaga.com) We will contact you in 12 hours.

[RFQ](#)

## General Description

Rail-to-rail output swing combined with dc accuracy are the key features of the OP495 quad and OP295 dual CBCMOS operational amplifiers. By using a bipolar front end, lower noise and higher accuracy than those of CMOS designs have been achieved. Both input and output ranges include the negative supply, providing the user with zero-in/zero-out capability. For users of 3.3 V systems such as lithium batteries, the OP295/OP495 are specified for 3 V operation.

Maximum offset voltage is specified at 300  $\mu$ V for 5 V operation, and the open-loop gain is a minimum of 1000 V/mV. This yields performance that can be used to implement high accuracy systems, even in single-supply designs.

The ability to swing rail-to-rail and supply 15 mA to the load makes the OP295/OP495 ideal drivers for power transistors and H bridges. This allows designs to achieve higher efficiencies and to transfer more power to the load than previously possible without the use of discrete components.

For applications such as transformers that require driving inductive loads, increases in efficiency are also possible. Stability while driving capacitive loads is another benefit of this design over CMOS rail-to-rail amplifiers. This is useful for driving coax cable or large FET transistors. The OP295/OP495 are stable with loads in excess of 300 pF.

The OP295 and OP495 are specified over the extended industrial ( $-40^{\circ}\text{C}$  to  $+125^{\circ}\text{C}$ ) temperature range. The OP295 is available in 8-lead PDIP and 8-lead SOIC\_N surface-mount packages. The OP495 is available in 14-lead PDIP and 16-lead SOIC\_W surface-mount packages.

## Features

Rail-to-rail output swing

Single-supply operation: 3 V to 36 V

Low offset voltage: 300  $\mu$ V

Gain bandwidth product: 75 kHz

High open-loop gain: 1000 V/mV

Unity-gain stable

Low supply current/per amplifier: 150  $\mu$ A maximum

## Application

Battery-operated instrumentation

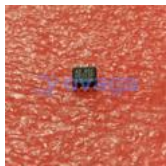
Servo amplifiers

Actuator drives

Sensor conditioners

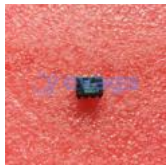
Power supply control

## Related Products



### [OP213F](#)

Analog Devices, Inc  
SMD/DIP-8/SOP-8



### [OP27GP](#)

Analog Devices, Inc  
PDIP-8



### [OP462GSZ](#)

Analog Devices, Inc  
SOIC-14



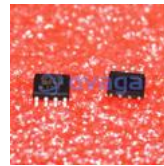
### [OP467GPZ](#)

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### [OP42AZ](#)

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