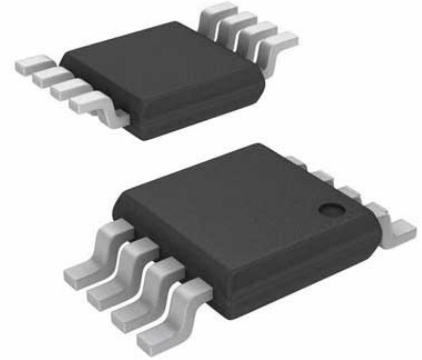


Ultralow Noise, LDO XFET Voltage References with Current Sink and Source

|               |                                     |
|---------------|-------------------------------------|
| Manufacturers | <a href="#">Analog Devices, Inc</a> |
| Package/Case  | MSOP-8                              |
| Product Type  | Power Management ICs                |
| RoHS          | Pb-free Halide free                 |
| Lifecycle     |                                     |



Images are for reference only

Please submit RFQ for ADR441ARMZ or [Email to us: sales@ovaga.com](mailto:sales@ovaga.com) We will contact you in 12 hours.

[RFQ](#)

## General Description

The ADR440/ADR441/ADR443/ADR444/ADR445 series is a family of XFET® voltage references featuring ultralow noise, high accuracy, and low temperature drift performance. Using Analog Devices, Inc., patented temperature drift curvature correction and XFET (eXtra implanted junction FET) technology, voltage change vs. temperature nonlinearity in the ADR440/ADR441/ADR443/ADR444/ADR445 is greatly minimized.

The XFET references offer better noise performance than buried Zener references, and XFET references operate off low supply voltage headroom (500 mV). This combination of features makes the ADR440/ADR441/ADR443/ADR444/ADR445 family ideally suited for precision signal conversion applications in high-end data acquisition systems, optical networks, and medical applications.

The ADR440/ADR441/ADR443/ADR444/ADR445 family has the capability to source up to 10 mA of output current and sink up to -5 mA. It also comes with a trim terminal to adjust the output voltage over a 0.5% range without compromising performance.

The ADR440/ADR441/ADR443/ADR444/ADR445 family is available in 8-lead MSOP and narrow SOIC packages and offered in two electrical grades. All versions are specified over the extended industrial temperature range of -40°C to +125°C.

## Features

Ultralow noise (0.1 Hz to 10 Hz)

ADR440: 1  $\mu\text{V}$  p-p

ADR444: 1.8  $\mu\text{V}$  p-p

ADR445: 2.25  $\mu\text{V}$  p-p

Superb temperature coefficient

A Grade: 10 ppm $^{\circ}\text{C}$

Low dropout operation (supply voltage headroom): 500 mV

Input range: (VOUT + 500 mV) to 18 V

High output source and sink current

Wide temperature range:  $-40^{\circ}\text{C}$  to  $+125^{\circ}\text{C}$

ADR441-EP supports defense and aerospace applications (AQEC standard)

Download(pdf)

Military temperature range ( $-55^{\circ}\text{C}$  to  $+125^{\circ}\text{C}$ )

Controlled manufacturing baseline

1 assembly/test site

1 fabrication site

Product change notification

Qualification data available on request

## Application

Precision data acquisition systems

High resolution data converters

Battery-powered instrumentation

Portable medical instruments

Industrial process control systems

Precision instruments

Optical control circuits

## Related Products



[ADP336ARMZ-REEL7](#)

Analog Devices, Inc  
MSOP-8



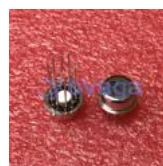
[AD737JRZ](#)

Analog Devices, Inc  
SOP-8



[ADP3367ARZ](#)

Analog Devices, Inc  
SOIC-8



[AD636JH](#)

Analog Devices, Inc  
TO-100-10



[ADP3330ARTZ3.3-RL7](#)

Analog Devices, Inc  
SOT-23-6



[ADR434BRZ](#)

Analog Devices, Inc  
SOIC-8



[ADR421ARZ](#)

Analog Devices, Inc  
SOP-8



[ADR3412ARJZ-R7](#)

Analog Devices, Inc  
SOT-23-6