

# CERTIFICATE OF COMPLIANCE

**Certificate Number** E214100  
**Report Reference** E214100-20200331  
**Issue Date** 2020-APRIL-06

**Issued to:** ANALOG DEVICES INC  
804 WOBURN ST  
WILMINGTON MA 01887-3494

**This certificate confirms that  
representative samples of**

COMPONENT - NONOPTICAL ISOLATING DEVICES  
Single Protection Non-Optical Isolator, Models ADP1031  
and ADP1032 may be followed by additional suffixes.

Have been investigated by UL in accordance with the  
component requirements in the Standard(s) indicated on  
this Certificate. UL Recognized components are incomplete  
in certain constructional features or restricted in  
performance capabilities and are intended for installation in  
complete equipment submitted for investigation to UL LLC.

**Standard(s) for Safety:** UL 1577, Optical Isolators.  
**Additional Information:** See the UL Online Certifications Directory at  
<https://iq.ulprospector.com> for additional information.

This *Certificate of Compliance* does not provide authorization to apply the UL Recognized Component Mark. Only the UL Follow-Up Services Procedure provides authorization to apply the UL Mark.

Only those products bearing the UL Recognized Component Mark should be considered as being UL Certified and covered under UL's Follow-Up Services.

Look for the UL Recognized Component Mark on the product.



Bruce Mahrenholz, Director North American Certification Program

UL LLC

Any information and documentation involving UL Mark services are provided on behalf of UL LLC (UL) or any authorized licensee of UL. For questions, please contact a local UL Customer Service Representative at <http://ul.com/aboutul/locations/>



File E214100  
Project 4789291399

March 31, 2020

REPORT

on

COMPONENT - Nonoptical Isolating Devices

ANALOG DEVICES INC  
WILMINGTON, MA

Copyright © 2020 UL LLC

UL LLC authorizes the above named company to reproduce this Report only for purposes as described in the Conclusion. The Report should be reproduced in its entirety; however to protect confidential product information, the Construction Details Descriptive pages may be excluded.

DESCRIPTION

PRODUCT COVERED:

USR - Single Protection Non-Optical Isolator, Models ADP1031 and ADP1032 may be followed by additional suffixes.

MAXIMUM RATINGS PER CHANNEL (at 25°C ambient) (\$):

| Model   | Current (mA)       |                 | Power (mW)         |                 | Isolation Voltage at 60 sec Vrms | Max Operating Ambient Temp (°C) | Max Junction Temp (°C) | Max Storage Temp (°C) | Max Data Rate, Mbps |
|---------|--------------------|-----------------|--------------------|-----------------|----------------------------------|---------------------------------|------------------------|-----------------------|---------------------|
|         | Side 1 Transmitter | Side 2 Receiver | Side 1 Transmitter | Side 2 Receiver |                                  |                                 |                        |                       |                     |
| ADP1031 | 36.5               | 24.5            | 358                | 136             | 2500                             | 105                             | 125                    | 150                   | 58                  |
| ADP1032 | 50.6               | 25.9            | 695                | 140             | 2500                             | 105                             | 125                    | 150                   | 58                  |

(\$) - For ambient temperatures higher than 25°C and up to Tmoa, refer to manufacturer's specifications and/or thermal derating curve data for complete electrical ratings.

## GENERAL:

These non-optical isolator devices consist of a transmitter coupled to a receiver. The transmitter and receiver are separated by an [insulating transformer and insulating barrier. Internal chips are connected to lead frames that are molded into the enclosure.

## TECHNICAL CONSIDERATIONS (NOT FOR FIELD REPRESENTATIVE'S USE):

Use - For use only in products where the acceptability of the combination is determined by UL LLC.

USR indicates this product was investigated under the UL Standard for Safety for Optical Isolators, UL 1577, Fifth Edition.

Conditions of Acceptability - Each device shall be reviewed with respect to the following conditions of acceptability:

1. The capability of the device to control a load has not been investigated.
2. These devices should be installed in a suitable end product enclosure.
3. The maximum junction temperature shall not be exceeded.
4. For single protection devices, the insulation to the case has not been evaluated. For double protection devices, the insulation to the case has been evaluated to the isolation voltage specified in the ratings table.
5. In addition to meeting single protection requirements, double protection optical isolators have also been investigated for use in up to 250 V, 50/60 Hz circuits in audio, video, and similar equipment in applications in which breakdown of the optical isolator may result in a risk of fire, electrical shock, or injury to persons.

## CONSTRUCTION DETAILS:

General - The product shall be constructed in accordance with the following description. All dimensions are approximate, unless specified as "max" or "min".

Markings - As specified in the Section General.