

# ADuM1311ARWZ

#### Digital Isolator CMOS 3-CH 1Mbps 16-Pin SOIC W Tube

Manufacturer:	Analog Devices, Inc
Package/Case:	SOP16
Product Type:	Drivers
RoHS:	RoHS Compliant/Lead free W
Lifecycle:	Active



Images are for reference only

Inquiry

#### **General Description**

The ADuM131x are 3-channel digital isolators based on Analog Devices, Inc., iCoupler® technology. Combining high speed CMOS and monolithic air core transformer technology, these isolation components provide outstanding performance characteristics superior to alternatives such as optocoupler devices. By avoiding the use of LEDs and photodiodes, iCoupler devices remove the design difficulties commonly associated with optocouplers. The typical optocoupler concerns regarding uncertain current transfer ratios, maximum operating temperature, and lifetime effects are eliminated with the simple iCoupler digital interfaces and stable performance characteristics. The need for external drivers and other discrete components is eliminated with these iCoupler products. Furthermore, iCoupler devices consume one-tenth to one-sixth the power of optocouplers at comparable signal data rates. The iCoupler also offers higher channel densities and more options for channel directionality.

The ADuM131x isolators provide three independent isolation channels in a variety of channel configurations and data rates up to 10 Mbps (see the Ordering Guide). All models operate with the supply voltage on either side ranging from 2.7 V to 5.5 V, providing compatibility with lower voltage systems as well as enabling voltage translation functionality across the isolation barrier. All products allow the user to predetermine the default output state in the absence of input VDD1 power with a simple control pin. Unlike other optocoupler alternatives, the ADuM131x isolators have a patented refresh feature that ensures dc correctness in the absence of input logic transitions and during power-up/ power-down conditions.

Key Features	Application
Low power operation	General-purpose multichannel isolation
Bidirectional communication	SPI interface/data converter isolation
Schmitt-trigger input	RS-232/RS-422/RS-485 transceiver
Up to 10Mbps data rate (NRZ)	
Programmable default output state	Industrial field bus isolation
>25kV/µs High common-mode transient immunity	

8.1mm External creepage



#### **Recommended For You**

#### ADM3490EARZ

Analog Devices, Inc SOP-8

#### ADuM5211ARSZ

Analog Devices, Inc

SSOP20

#### ADuM1410BRWZ

Analog Devices, Inc SOP16

#### ADM485ANZ

Analog Devices, Inc

#### ADUM142E0BRZ

Analog Devices, Inc SOP-16

#### ADuM3160BRWZ-RL

Analog Devices, Inc SOP16

#### ADuM1201BRZ-RL7

Analog Devices, Inc SOP8

#### AD698APZ

Analog Devices, Inc PLCC28

# ADuM6400ARWZ Analog Devices, Inc SOP16

ADuM1412BRWZ Analog Devices, Inc SOP16

#### ADMB232EARUZ

Analog Devices, Inc TSSOP-16

#### ADV7623BSTZ

Analog Devices, Inc LQFP144

# ADMB251EARWZ

Analog Devices, Inc SOP20

### ADuM1281BRZ

Analog Devices, Inc SOP8

# ADV7622BSTZ Analog Devices, Inc TQFP144