

## Sensor and Detector Interface 36V 2-Wire Interface 8-Pin SOIC Tube



Images are for reference only

[Inquiry](#)

**Manufacturer:** [Texas Instruments, Inc](#)

**Package/Case:** SOP8

**Product Type:** Drivers

**RoHS:** RoHS Compliant/Lead free 

**Lifecycle:** Active

### General Description

The XTR115 and XTR116 are precision current output converters designed to transmit analog 4-to-20mA signals over an industry standard current loop. They provide accurate current scaling and output current limit functions.

The on-chip voltage regulator (5V) can be used to power external circuitry. A precision on-chip VREF (2.5V for XTR115 and 4.096V for XTR116) can be used for offsetting or to excite transducers. A current return pin (IRET) senses any current used in external circuitry to assure an accurate control of the output current.

The XTR115 is a fundamental building block of smart sensors using 4-to-20mA current transmission.

The XTR115 and XTR116 are specified for operation over the extended industrial temperature range, -40°C to +85°C.

## Key Features

LOW QUIESCENT CURRENT: 200 $\mu$ A

5V REGULATOR FOR EXTERNAL CIRCUITS

V REF FOR SENSOR EXCITATION:

LOW SPAN ERROR: 0.05%

LOW NONLINEARITY ERROR: 0.003%

WIDE LOOP SUPPLY RANGE: 7.5V to 36V

SO-8 PACKAGE

APPLICATIONS

2-WIRE, 4-20mA CURRENT LOOP TRANSMITTER

SMART TRANSMITTER

INDUSTRIAL PROCESS CONTROL

TEST SYSTEMS

COMPATIBLE WITH HART MODEM

CURRENT AMPLIFIER

VOLTAGE-TO-CURRENT AMPLIFIER

## Recommended For You

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### XTR305IRGWR

Texas Instruments, Inc

QFN20

### XTR101AP

Texas Instruments, Inc

DIP

### XTR110AG

Texas Instruments, Inc

DIP

### XTR300AIRGWR

Texas Instruments, Inc

VQFN20

### XTR117AIDRBT

Texas Instruments, Inc

VDFN-8

### XTR105U

Texas Instruments, Inc

SOP14

### XTR106P

Texas Instruments, Inc

DIP14

### XTR110KP

Texas Instruments, Inc

DIP16

### XTR106PA

Texas Instruments, Inc

DIP-14

### XTR111AIDRCT

Texas Instruments, Inc

VSON10

### XTR105P

Texas Instruments, Inc

DIP

### XTR112UA

Texas Instruments, Inc

SOP14

**XTR105UA**

Texas Instruments, Inc

SOP14

**XTR101AU**

Texas Instruments, Inc

SOIC16

**XTR101AG**

Texas Instruments, Inc

DIP14