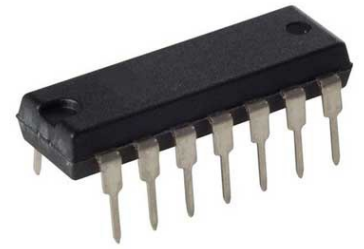


**Sensor and Detector Interface 36V 2-Wire Interface 14-Pin
PDIP Tube**

Images are for reference only

[Inquiry](#)**Manufacturer:** [Texas Instruments, Inc](#)**Package/Case:** DIP14**Product Type:** Drivers**RoHS:** RoHS Compliant/Lead free **Lifecycle:** Active**General Description**

The XTR105 is a monolithic 4-20mA, 2-wire current transmitter with two precision current sources. It provides complete current excitation for platinum RTD temperature sensors and bridges, instrumentation amplifiers, and current output circuitry on a single integrated circuit.

Versatile linearization circuitry provides a 2nd-order correction to the RTD, typically achieving a 40:1 improvement in linearity.

Instrumentation amplifier gain can be configured for a wide range of temperature or pressure measurements. Total unadjusted error of the complete current transmitter is low enough to permit use without adjustment in many applications. This includes zero output current drift, span drift, and nonlinearity. The XTR105 operates on loop power-supply voltages down to 7.5V.

The XTR105 is available in DIP-14 and SO-14 surface-mount packages and is specified for the -40°C to +85°C industrial temperature range.

Key Features

LOW UNADJUSTED ERROR

TWO PRECISION CURRENT SOURCES: 800 μ A each

LINEARIZATION

2-OR 3-WIRE RTD OPERATION

LOW OFFSET DRIFT: 0.4 μ V/ $^{\circ}$ C

LOW OUTPUT CURRENT NOISE: 30NAPP

HIGH PSR: 110dB minimum

HIGH CMR: 86dB minimum

WIDE SUPPLY RANGE: 7.5V to 36V

DIP-14 AND SO-14 PACKAGES

APPLICATIONS
INDUSTRIAL PROCESS CONTROL

FACTORY AUTOMATION

SCADA REMOTE DATA ACQUISITION

REMOTE TEMPERATURE AND PRESSURE TRANSDUCERS

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Recommended For You

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

XTR115UA

Texas Instruments, Inc
SOP8

XTR105P

Texas Instruments, Inc
DIP

XTR112UA

Texas Instruments, Inc

SOP14

XTR105UA

Texas Instruments, Inc

SOP14

XTR101AU

Texas Instruments, Inc

SOIC16