

Analog Current or Voltage Output Driver 20-Pin VQFN EP T/R

Manufacturer:	Texas Instruments, Inc	<input type="text" value="XTR305IRGWR Image"/> Images are for reference only <input type="button" value="Inquiry"/>
Package/Case:	QFN20	
Product Type:	Amplifier ICs	
RoHS:	RoHS Compliant/Lead free 	
Lifecycle:	Active	

General Description

The XTR305 is a complete output driver for cost-sensitive industrial and process control applications. The output can be configured as current or voltage by the digital I/V select pin. No external shunt resistor is required. Only external gain-setting resistors and a loop compensation capacitor are required.

The separate driver and receiver channels provide flexibility. The instrumentation amplifier (IA) can be used for remote voltage sense or as a high-voltage, high-impedance measurement channel. In voltage-output mode, a copy of the output current is provided, allowing calculation of load resistance.

The digital output-selection capability, together with the error flags and monitor pins, makes remote configuration and troubleshooting possible. Fault conditions on the output and on the IA input, as well as overtemperature conditions, are indicated by the error flags. The monitoring pins provide continuous feedback about load power or impedance. For additional protection, the maximum output current is limited, and thermal protection is provided.

The XTR305 is specified over the 40°C to +85°C industrial temperature range and for supply voltages up to 40 V, and is operational over the extended industrial temperature range (55°C to +125°C).

Key Features

User-Selectable: Current or Voltage Output

VOUT: ±10 V (up to ±17.5 V at ±20-V supply)

IOUT: ±20 mA (Linear up to ±24 mA)

40-V Supply Voltage

Diagnostic Features:

Short- or Open-Circuit Fault Indicator Pin

Thermal Protection

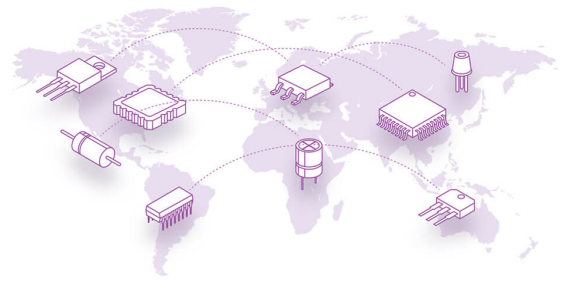
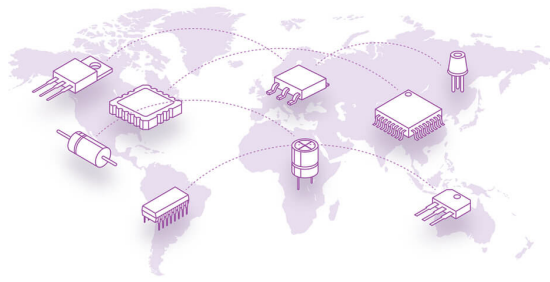
Overcurrent Protection

No Current Shunt Required

Output Disable for Single Input Mode

Separate Driver and Receiver Channels

Designed For Testability



Recommended For You

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

XTR101AG

Texas Instruments, Inc

DIP14