

# 32 Gbaud Dual-Channel, Differential Input, Linear Transimpedance/Variable-Gain Amplifier

**Part No.**

IN3250TA

**Product Type**

Transimpedance Amplifiers

**Market Segments**

Long Haul/Metro

**Applications**100G/200G Coherent Receivers  
Class 20 ICR**Description**

The IN3250TA is a dual-channel, differential linear transimpedance/variable-gain amplifier (TIA/ VGA) for 100G and 200G coherent detection receivers for long haul and metro networks.

The IN3250TA offers two gain control modes: manual and automatic. In manual mode, the gain is controlled via an external control pin. In automatic mode, the gain is automatically adjusted to deliver a constant output voltage.

The IN3250TA includes an adjustable bandwidth feature that allows the user to optimize receiver frequency response for different photodiode and ADC/DSP combinations.

The IN3250TA operates from a +3.3 V power supply and is available in die form.

**Features**

- Supports baud rates up to 32 Gbaud
- Dual-channel monolithic TIA/VGA
- 500  $\mu\text{m}$  channel pitch
- Wide differential electrical gain
- High electrical bandwidth
- Adjustable output amplitude
- Automatic or manual gain control
- Peak detector output
- Output control
- Low power consumption
- Available in die form