

General Isolation Amplifiers

Introduction

The general isolation amplifier developed by Startorus Fusion is designed for analog signal isolation. The isolation amplifier supports ± 10 V input, with a bandwidth ranging from DC to 200 kHz and an isolation voltage of up to 3000 VDC. It offers multiple gain settings such as $\times 1$, $\times 5$, $\times 10$, equivalent to an input range of ± 1 V to ± 10 V, eliminating the need for external attenuators or gain stages.

With a 1 M Ω input impedance, errors caused by the internal resistance of signal sources can be reduced. It also features an internal low-pass filter to suppress signal noise. The output load capacity can reach 250 mA, ensuring reliability and signal-to-noise ratio in long-distance signal transmission. Additionally, the isolation amplifier adopts a 2U panel lock form, providing flexible multi-channel expansion capabilities.



Parameters

- Gain: 1, 5, 10
- Bandwidth: DC-200 kHz(-3 dB)
- Accuracy: 0.5%
- Input Voltage Range: ± 10 V (gain=1), ± 2 V (gain=5), ± 1 V (gain=10)
- Input Impedance: 1M Ω
- Isolation Voltage: 3000VDC

Applications

Isolation amplifiers can be applied in industrial measurement and control systems in electric power, electronics, petrochemicals, and steel, providing common-mode voltage isolation and safety protection of equipments, ensuring system stability and reliability.