



Applied Processor and Measurement, Inc.

Model DFA-100 Dual Channel Diff Amp Module - Instructions

- Summary

The Model DFA-100 Dual Channel Diff Amp Module provides 2 channels of differential input signal to single wire output conversion for general purpose data acquisition and control applications. The differential inputs provide over +/- 100V common mode rejection eliminating ground loops and removing the common ground connection between the single-ended acquisition equipment and the source of the analog signal.

The Model DFA-100 module provides a simple, in-line solution for common mode voltage rejection, a typical issue in industrial applications. Note that the DFA-100 does not provide input / output (optical) isolation.

- Installation

Differential input signals should be connected to the CH1 and CH2 input terminals on the left side of the unit.

A 5V (+/- 0.5V) DC source is required for module power. Only 4mA is required for powering the module (this does not include the single-ended amplifier output load drive requirements).

The module will convert the differential input to a single-ended output, referenced to the GND pin, over a +/- 5V I/O range.

- Warnings

1. Do not "hot plug" the DFA-100 into the 5V DC input power. Be sure that the GND pin is connected prior to applying power to the module.
2. The differential inputs may possess a valid analog input signal even when the DFA-100 module is not powered on.
3. Avoid wiring which would cause lead length on the single ended outputs to exceed 3 ft.