



INA128
INA129

Precision, Low Power INSTRUMENTATION AMPLIFIERS

FEATURES

- **LOW OFFSET VOLTAGE:** 50 μ V max
- **LOW DRIFT:** 0.5 μ V/ $^{\circ}$ C max
- **LOW INPUT BIAS CURRENT:** 5nA max
- **HIGH CMR:** 120dB min
- **INPUTS PROTECTED TO \pm 40V**
- **WIDE SUPPLY RANGE:** \pm 2.25 to \pm 18V
- **LOW QUIESCENT CURRENT:** 700 μ A
- **8-PIN PLASTIC DIP, SO-8**

APPLICATIONS

- **BRIDGE AMPLIFIER**
- **THERMOCOUPLE AMPLIFIER**
- **RTD SENSOR AMPLIFIER**
- **MEDICAL INSTRUMENTATION**
- **DATA ACQUISITION**

DESCRIPTION

The INA128 and INA129 are low power, general purpose instrumentation amplifiers offering excellent accuracy. Their versatile 3-op amp design and small size make them ideal for a wide range of applications. Current-feedback input circuitry provides wide bandwidth even at high gain (200kHz at $G = 100$).

A single external resistor sets any gain from 1 to 10,000. INA128 provides an industry standard gain equation; INA129's gain equation is compatible with the AD620.

The INA128/INA129 is laser trimmed for very low offset voltage (50 μ V), drift (0.5 μ V/ $^{\circ}$ C) and high common-mode rejection (120dB at $G \geq 100$). It operates with power supplies as low as \pm 2.25V, and quiescent current is only 700 μ A—ideal for battery operated systems. Internal input protection can withstand up to \pm 40V without damage.

The INA128/INA129 is available in 8-pin plastic DIP, and SO-8 surface-mount packages, specified for the -40° C to $+85^{\circ}$ C temperature range. The INA128 is also available in dual configuration, the INA2128.

