

## Zero Drift, Bidirectional Current/Power Monitor With I2C Interface



Images are for reference only

[Inquiry](#)

**Manufacturer:** [Texas Instruments, Inc](#)

**Package/Case:** SOIC8

**Product Type:** Power Management ICs

**RoHS:** RoHS Compliant/Lead free 

**Lifecycle:** Active

## General Description

The INA219 is a current shunt and power monitor with an I2C- or SMBUS-compatible interface. The device monitors both shunt voltage drop and bus supply voltage, with programmable conversion times and filtering. A programmable calibration value, combined with an internal multiplier, enables direct readouts of current in amperes. An additional multiplying register calculates power in watts. The I2C- or SMBUS-compatible interface features 16 programmable addresses.

The INA219 is available in two grades: A and B. The B grade version has higher accuracy and higher precision specifications.

The INA219 senses across shunts on buses that can vary from 0 to 26 V. The device uses a single 3- to 5.5-V supply, drawing a maximum of 1 mA of supply current. The INA219 operates from -40°C to 125°C.

## Key Features

Senses Bus Voltages from 0 to 26 V

Reports Current, Voltage, and Power

16 Programmable Addresses

High Accuracy: 0.5% (Maximum) Over Temperature (INA219B)

Filtering Options

Calibration Registers

SOT23-8 and SOIC-8 Packages

## Recommended For You

### INA3221AIRGVR

Texas Instruments, Inc

VQFN16

### INA200AQDGKRQ1

Texas Instruments, Inc

MSOP8

### INA196AIDBVT

Texas Instruments, Inc

SOT23-5

**INA220AIDGSR**

Texas Instruments, Inc  
MSOP10

**INA198AQDBVRQ1**

Texas Instruments, Inc  
SOT23-5

**INA228AQDGSRQ1**

Texas Instruments, Inc  
VSSOP-10

**INA237AQDGSRQ1**

Texas Instruments, Inc  
VSSOP10

**INA168QDBVRQ1**

Texas Instruments, Inc  
SOT23-5

**INA226AQDGSRQ1**

Texas Instruments, Inc  
VSSOP10

**INA3221AQRGVRQ1**

Texas Instruments, Inc  
QFN16

**INA195AIDBVR**

Texas Instruments, Inc  
SOT23-5

**INA197AIDBVT**

Texas Instruments, Inc  
SOT23-5

**INA213AQDCKRQ1**

Texas Instruments, Inc  
SC70-6

**INA300AQDGSRQ1**

Texas Instruments, Inc  
VSSOP-10

**INA196AIDBVR**

Texas Instruments, Inc  
SOT23-5