# CS-4173-0R1 Datasheet



### Introduce

The CS-4173 is a Low-Cost, Compact Current-Sense module. It is detected by collecting the high-side current to achieve the load current, the main chip is MAX4173 high-side current-sense amplifier. The MAX4173 high-side current-sense amplifier features a 0 to +28V input common-mode range that is independent of supply voltage. This feature allows the monitoring of current out of a battery in deep discharge and also enables high-side current sensing at voltages greater than the supply voltage (VCC). High-side current monitoring is especially useful in battery-powered systems, since it does not interfere with the ground path of the battery charger. For the module, Derivation of calculation function is: Vout = Vsense \* 50, I = Vsense/Rsense, so the end result is I = Vout/(50\*Rsense) = Vout/5, the unit is A.

## Features

- Low-Cost, Compact Current-Sense Solution
- Wide 0 to +28V Common-Mode Range (Independent of Supply Voltage)
- +3V to +28V Operating Supply
- ±0.5% Full-Scale Accuracy
- Wide 1.7MHz Bandwidth
- 420μA Supply Current



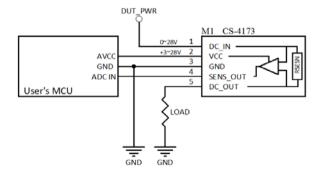
Parametric Description

PARAMETER	SYMBOL	MIN	TYP	MAX	UNITS
Operating Voltage Range	VCC	3		28	V
Common-Mode Input Range	VCMR	0		28	V
Supply Current	ICC	0.42		1.0	mA
Full-Scale Sense Voltage	VSENSE		150		mV
I = Vsens_out / 5 (unit: A)					

# Application

- 1. Notebook Computers
- 2. Portable/Battery-Powered Systems
- 3. Smart Battery Packs/Chargers
- 4. Cell Phones
- 5. Power-Management Systems
- 6. General System/Board-Level Current Monitoring
- 7. PA Bias Control
- 8. Precision Current Sources

## Application diagram



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