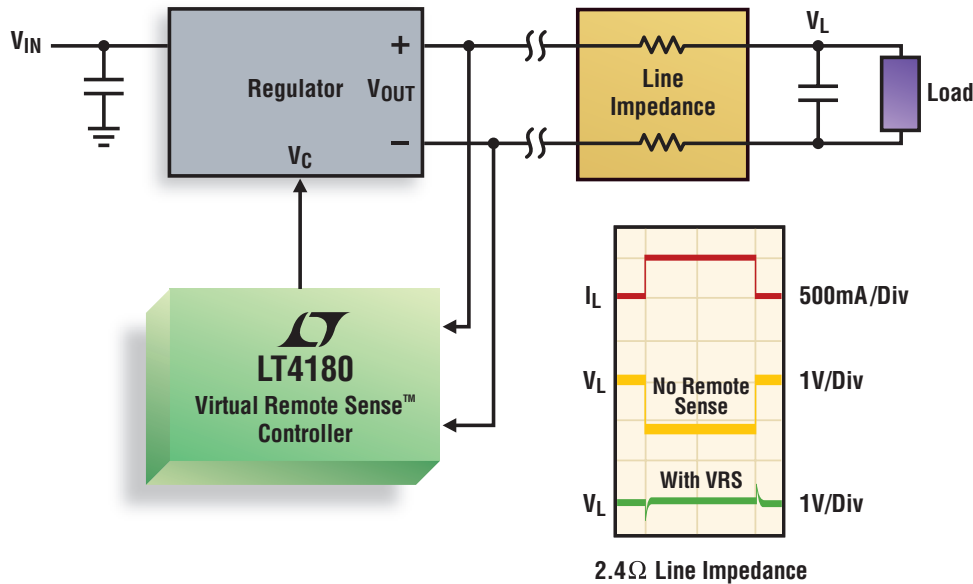


Virtual Remote Sense Sensing Without the Wires



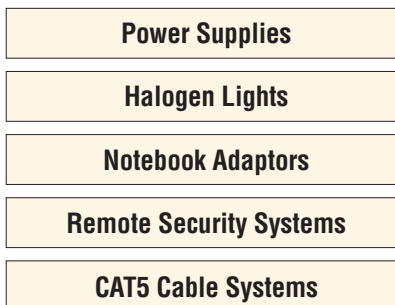
Eliminates Cable Voltage Drop

The LT[®]4180 solves the problem of tight load regulation over long, resistive cables without an additional pair of remote sense wires. Virtual remote sensing (VRS) is achieved by continuously modulating the current to the load and measuring the resultant voltage change due to wiring resistance. This measurement is used to infer the total DC voltage drop in the wiring and the LT4180 controls the power supply by feeding back to maintain tight regulation of the load voltage. Load regulation improvement of 50:1 is possible over a wide range of currents and wiring drops.

Features

- Compatible with Isolated and Nonisolated Supplies
- Input Voltage: 3.1V to 50V
- ±1% Internal Voltage Reference
- Soft-Correct Reduces Turn-On Transients
- Undervoltage and Overvoltage Protection
- Optional Spread Spectrum Dither

Typical Applications



Info & Free Samples

www.linear.com/4180

1-800-4-LINEAR



www.linear.com/an126

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