

Common-Mode Bias Current

The NI 9234 uses common-mode bias current to bias the current-limiting diodes when IEPE current is turned off. When the NI 9234 is using grounded signal sources, this current causes an error that is dependent on the AI- lead impedance. This error is approximately 50 ppm of range and 15 ppm of reading per ohm of AI- impedance. The common-mode bias current causes an error only with grounded sources and is not an issue with floating signal sources. For best accuracy, use low-impedance leads when connecting grounded signal sources.