



Figure 8 This gain-of-1000 preamplifier allows rms-to-dc conversion with 1-mV full-scale sensitivity. The input splits into high- and low-frequency paths that recombine at the rms converter. The amplifier's 650-kHz, -3-dB bandwidth preserves the rms converter's 6-kHz, 1%-error bandwidth. The noise floor of this circuit is 15 μ V.