Application Brief

Need a Lower Noise Power Supply?

Keysight B2960A 6.5 Digit Low Noise Power Source

Optimum choice for Oscillator Characterization
- True oscillator characteristics are difficult to evaluate with using noisy DC power supplies

Superior low noise performance removes the need for an external filter
- No needs of hard work to develop and maintain the self-developed external filter circuits

B2960A Series Enables True Oscillator Characterization

Key Features
- Best solution for applications requiring ultra-low noise power supply
- 10 µVrms (1 nVrms/√Hz@10 kHz)
- Two types of dedicated external filters:
  - High current ultra-low noise & Ultra-low noise (10 µVrms)
  - Low noise (350 µVrms)
- Voltage and current monitor functions
- 4.5 digit resolution & Remote sense

Benefits
- No need for customized external filters
- No need for digital multi-meter output monitoring
Solutions for a Variety of Output Voltages and Noise Levels

N1294A-020 (Option) High Current Ultra-Low Noise Filter
- Best-in-class low noise performance for voltages and currents of up to 21 V and 500 mA
- Optimum solution for evaluation of oscillators and devices/circuits sensitive to power supply noise

N1294A-021 (Option) Ultra-Low Noise Filter
- Best-in-class low noise performance for voltages and currents of up to 42 V and 105 mA
- Optimum solution for evaluation of oscillators and devices/circuits sensitive to power supply noise

N1294A-022 (Option) Low Noise Filter
- Linear power supply low noise performance
- Wide bipolar voltage/current output range

Example: B2962A oscillator test configuration

<table>
<thead>
<tr>
<th>Model</th>
<th>Description</th>
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<tbody>
<tr>
<td>B2961A</td>
<td>Low noise performance (3 mVrms)</td>
</tr>
<tr>
<td>B2962A</td>
<td>210 V/3 A voltage/current output available</td>
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<tr>
<td>N1294A-020</td>
<td>External high current ultra-low noise filter</td>
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<td>Best-in-class low noise performance (10 μVrms)</td>
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<td>21 V/500 mA voltage/current output available</td>
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<td>N1294A-021</td>
<td>External ultra-low noise filter</td>
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<td>Best-in-class low noise performance (10 μVrms)</td>
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<tr>
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<td>42 V/105 mA voltage/current output available</td>
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<tr>
<td>N1294A-022</td>
<td>External low noise filter</td>
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<tr>
<td>(Optional)</td>
<td>Superior low noise performance (350 μVrms)</td>
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<tr>
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<td>210 V/3 A (DC) voltage/current output available</td>
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For additional information please visit: www.keysight.com/find/precisionSOURCE