Application Brief

High Speed Current/Voltage Source Simplifies Electronic Circuit Final Verification/Validation/Debug

Keysight B2961A/62A 6.5 Digit Low Noise Power Source with 0.02 % basic accuracy & waveform monitor function

Convenient FG/PG\(^1\) function provides highest accuracy and stability available (basic accuracy 0.02 %, 1 mHz -10 kHz)

Enhance validation accuracy
- Higher accuracy, higher stability and much lower noise than conventional power supplies greatly improve measurement results
- Arbitrary waveform generation (AWG) function enables you to emulate signal variations to the circuit as it switches on and off

Eliminate the need to create custom circuits for validation
- Low noise performance removes the need for an external filter circuit
- No stabilizing circuit is required
- No need to develop a circuit to source constant current

Improve test efficiency
- Voltage source’s ability to monitor current eliminates need for additional meter
- No digital multimeter necessary since it can monitor its own output
- Source can be connected to the circuit output and operate as an electronic load

Voltage Source Mode

Current Source Mode

Excellent Linearity

Variable Duty Cycle

Highly Stable Output

Simulated glitch

Various Output Modes

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1. FG: Function Generator
   PG: Pulse Generator
## Key specification and characteristics

<table>
<thead>
<tr>
<th>Model</th>
<th>Description</th>
<th>Voltage noise (10 Hz to 20 MHz)</th>
<th>Max output</th>
<th>Min. source resolution</th>
<th>ARB</th>
<th>Memory</th>
<th>Built-in functions</th>
</tr>
</thead>
<tbody>
<tr>
<td>B2961A</td>
<td>Low noise power source 1 ch</td>
<td>3 mVrms</td>
<td>31.8 W</td>
<td>± 210 V</td>
<td>± 10.5 A 100 nV 0.01 pA</td>
<td>100 k points</td>
<td>Sinusoid, Square, Trapezoid, Ramp, Triangle, Exponential, User defined</td>
</tr>
<tr>
<td>B2962A</td>
<td>Low noise power source 2 ch</td>
<td>350 µVrms¹</td>
<td>31.8 W</td>
<td>± 210 V</td>
<td>± 3.03 A 100 nV 10 pA</td>
<td></td>
<td></td>
</tr>
<tr>
<td>B2961A with N1294A-022</td>
<td>B2961A with low noise filter option</td>
<td>10 µVrms¹</td>
<td>4.4 W</td>
<td>± 42 V</td>
<td>± 0.1 A 100 nV 10 pA</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

1. Supplemental characteristics

### Applications

- A/D & D/A converters
- High precision analog IC and circuitry
- RFICs and circuitry
- Voltage controlled oscillators (VCOs)
- Solar cells and the interface circuitry
- Crystal oscillators

The Keysight B2961A/62A current and voltage source is an ideal solution for validating electronic circuit performance and obtaining information that can be incorporated into a circuit’s datasheet.

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To Learn More... please visit our website below: www.keysight.com/find/precisionSOURCE

**Keysight B2900 Precision Instrument Family**

The B2960A series is a member of the B2900 Precision Instrument Family, which includes several different source and measurement solutions. Further information is available at: www.keysight.com/find/b2900a

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