Fluke offers a range of function, pulse/function and universal waveform generators that are designed to meet your requirements and stay within your budget. Whether you require a simple LF function generator, or a powerful multi-channel arb, we have a product designed with you in mind.

<table>
<thead>
<tr>
<th>Function Generators</th>
<th>Universal Waveform Generators</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Model</strong></td>
<td><strong>80</strong></td>
</tr>
<tr>
<td>Output channels</td>
<td>1</td>
</tr>
<tr>
<td>Maximum amplitude (into 50 Ω)</td>
<td>16 Vpp</td>
</tr>
<tr>
<td><strong>Standard Waveforms</strong></td>
<td></td>
</tr>
<tr>
<td>Sine maximum frequency</td>
<td>50 MHz</td>
</tr>
<tr>
<td>Square maximum frequency</td>
<td>50 MHz</td>
</tr>
<tr>
<td>Pulse maximum frequency</td>
<td>N/A</td>
</tr>
<tr>
<td>Pulses</td>
<td>No</td>
</tr>
<tr>
<td>Noise Generator</td>
<td>No</td>
</tr>
<tr>
<td>Frequency Accuracy</td>
<td>10 ppm</td>
</tr>
<tr>
<td><strong>Arbitrary Waveforms</strong></td>
<td></td>
</tr>
<tr>
<td>Maximum Sampling Frequency</td>
<td>27.48 MS/s</td>
</tr>
<tr>
<td>Waveform length (points)</td>
<td>1024</td>
</tr>
<tr>
<td>Waveform memory</td>
<td>5 x 1 K blocks</td>
</tr>
<tr>
<td>Vertical resolution</td>
<td>10 bits</td>
</tr>
<tr>
<td>Waveform sequencing (max. # of segments)</td>
<td>16</td>
</tr>
<tr>
<td>Looping</td>
<td>No</td>
</tr>
<tr>
<td><strong>Operating Modes</strong></td>
<td></td>
</tr>
<tr>
<td>Triggered</td>
<td>Yes</td>
</tr>
<tr>
<td>Gated</td>
<td>Yes</td>
</tr>
<tr>
<td>Burst</td>
<td>Yes</td>
</tr>
<tr>
<td>Frequency sweep</td>
<td>Yes</td>
</tr>
<tr>
<td>Selectable output filter</td>
<td>Yes</td>
</tr>
<tr>
<td>Modulation source</td>
<td>External dc-100 kHz</td>
</tr>
<tr>
<td>Modulation</td>
<td>AM, FM</td>
</tr>
<tr>
<td>Signal summing</td>
<td>No</td>
</tr>
<tr>
<td>VCO/VCA input</td>
<td>Yes</td>
</tr>
<tr>
<td>Phase lock to external analog signal</td>
<td>Yes</td>
</tr>
<tr>
<td>Multi-unit phase lock</td>
<td>Yes</td>
</tr>
<tr>
<td><strong>General</strong></td>
<td></td>
</tr>
<tr>
<td>GPIB interface</td>
<td>Yes</td>
</tr>
<tr>
<td>RS-232 interface (conventional mode)</td>
<td>No</td>
</tr>
<tr>
<td>USB</td>
<td>No</td>
</tr>
<tr>
<td>Ethernet</td>
<td>No</td>
</tr>
<tr>
<td></td>
<td>Plus Optional</td>
</tr>
<tr>
<td>Recommended replacement for obsolete models</td>
<td>HP 8116A</td>
</tr>
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</table>
## Signal Sources

### Selection Guide

#### Arbitrary Waveform Generators

<table>
<thead>
<tr>
<th>Model</th>
<th>291</th>
<th>292</th>
<th>294</th>
<th>396</th>
<th>397</th>
</tr>
</thead>
<tbody>
<tr>
<td>Output channels</td>
<td>1</td>
<td>2</td>
<td>4</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Maximum amplitude (into 50 Ω)</td>
<td>10 Vpp</td>
<td>10 Vpp</td>
<td>10 Vpp</td>
<td>10 Vpp</td>
<td>10 Vpp</td>
</tr>
</tbody>
</table>

#### Standard Waveforms

<table>
<thead>
<tr>
<th></th>
<th>291</th>
<th>292</th>
<th>294</th>
<th>396</th>
<th>397</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sine maximum frequency</td>
<td>40 MHz</td>
<td>40 MHz</td>
<td>40 MHz</td>
<td>50 MHz</td>
<td>50 MHz</td>
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<tr>
<td>Square maximum frequency</td>
<td>50 MHz</td>
<td>50 MHz</td>
<td>50 MHz</td>
<td>50 MHz</td>
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<tr>
<td>Pulse maximum frequency</td>
<td>10 MHz</td>
<td>10 MHz</td>
<td>10 MHz</td>
<td>10 MHz</td>
<td>10 MHz</td>
</tr>
<tr>
<td>Pulses</td>
<td>Pulse Train</td>
<td>Pulse Train</td>
<td>Pulse Train</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Noise generator</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Frequency accuracy</td>
<td>10 ppm</td>
<td>10 ppm</td>
<td>10 ppm</td>
<td>1 ppm</td>
<td>1 ppm</td>
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</table>

#### Arbitrary Waveforms

<table>
<thead>
<tr>
<th></th>
<th>291</th>
<th>292</th>
<th>294</th>
<th>396</th>
<th>397</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maximum sampling frequency</td>
<td>100 MS/s</td>
<td>100 MS/s</td>
<td>100 MS/s</td>
<td>125 MS/s</td>
<td>125 MS/s</td>
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<tr>
<td>Waveform length (points)</td>
<td>1 M</td>
<td>1 M</td>
<td>1 M</td>
<td>16 to 4 M</td>
<td>16 to 4 M</td>
</tr>
<tr>
<td>Waveform memory</td>
<td>Removable compact FLASH card</td>
<td>Removable compact FLASH card</td>
<td>Removable compact FLASH card</td>
<td>1 MByte memory</td>
<td>4 MByte memory</td>
</tr>
<tr>
<td>Vertical resolution</td>
<td>12 bit</td>
<td>12 bit</td>
<td>12 bit</td>
<td>14 bits</td>
<td>14 bits</td>
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<tr>
<td>Waveform sequencing (max. # of segments)</td>
<td>1024</td>
<td>1024</td>
<td>1024</td>
<td>4096</td>
<td>4096</td>
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<tr>
<td>Looping</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
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#### Operating Modes

<table>
<thead>
<tr>
<th></th>
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<th>292</th>
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<th>396</th>
<th>397</th>
</tr>
</thead>
<tbody>
<tr>
<td>Triggered</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Gated</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Burst</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Frequency sweep</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Selectable output filter</td>
<td>40 MHz Elliptic, 20 MHz Bessel, none</td>
<td>40 MHz Elliptic, 20 MHz Bessel, none</td>
<td>40 MHz Elliptic, 20 MHz Bessel, none</td>
<td>50 MHz, 25 MHz, both or none</td>
<td>50 MHz, 25 MHz, both or none</td>
</tr>
<tr>
<td>Modulation source</td>
<td>External dc-100 kHz</td>
<td>External dc-100 kHz</td>
<td>External dc-100 kHz</td>
<td>Internal dc-200 kHz</td>
<td>Internal dc-200 kHz</td>
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<tr>
<td>Modulation</td>
<td>AM, SCM,Tone</td>
<td>AM, SCM,Tone</td>
<td>AM, SCM,Tone</td>
<td>AM, FM,FSK, Ramped FSK</td>
<td>AM, FM,FSK, Ramped FSK</td>
</tr>
<tr>
<td>Signal summing</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>VCO/VCA input</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Phase lock to external analog signal</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Multi-unit phase lock</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>

#### General

<table>
<thead>
<tr>
<th></th>
<th>291</th>
<th>292</th>
<th>294</th>
<th>396</th>
<th>397</th>
</tr>
</thead>
<tbody>
<tr>
<td>GPIB interface</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>RS-232 interface (conventional mode)</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>USB</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Ethernet</td>
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<td>No</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
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<tr>
<td>Recommended replacement for obsolete models</td>
<td>WaveTek 395</td>
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</tbody>
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**Fluke. Keeping your world up and running.**