Arbitrary Waveform Generator





Features

- RoHS Compliant
- Max 60MHz frequency output,300MSa/s Sample rate
- · 14 bits Vertical Resolution, 100K Arb waveform length
- Comprehensive waveform output: 5 basic waveforms, and 160 built-in arbitrary waveforms
- Comprehensive modulation functions: AM, FM, PM, PWM, FSK, 3FSK, 4FSK, PSK, ASK, BPSK, OSK, DSBAM, QPSK, SUM, sweep Burst
- · SCPI, and LabVIEW supported
- 3.6 inch (480 × 272 pixels) multi-touch screen, support

Performance Specifications

| Model | MP751061 | MP751062 |
|--|---|--------------|
| Channel | 2 | |
| Frequency Output | 30MHz | 60MHz |
| Sample Rate | 125MSa/s | 300MSa/s |
| Vertical Resolution | 14 | bits |
| Waveform | | |
| Standard Waveform | sine, square, pulse, ramp, noise | |
| Arbitrary Waveform | Exponential rise, exponential fall, sin(x)/x, step wave, and others, total 150 built-in waveforms | |
| Frequency (resolution 1µHz) | | |
| Sine | 1µHz-30MHz | 1µHz-60MHz |
| Square | 1μHz ~ 15MHz | 1µHz ~ 20MHz |
| Pulse | 1μHz ~ 15MHz | 1µHz ~ 20MHz |
| Ramp | 1µHz ∼ 1MHz | 1µHz ∼ 2MHz |
| Noise | 20MHz (-3dB, typical) | |
| Arbitrary Waveform | 1µHz ~10MHz | |
| Sine Wave Spectrum Purity | | |
| Harmonic Distortion (typical (0dB)) | DC - 1MHz: <-65dBc 1MHz - 30MHz: <-60dBc 30MHz - 60MHz: <-50dBc | |
| Total Harmonic Distortion | <0.2%, 10 Hz to 20 kHz, 1 Vpp | |
| Spurious (non-harmonic) (typical (0dB)) | ≤10MHz: <-70dBc >10MHz: <-70dBc + 6dB/ octave band | |
| Phase Noise (typical (0 dBm, 10 kHz deviation)) | typical (0dBm, 10kHz offset) 10MHz: -110dBc/Hz | |
| Square | | |
| Rise / Fall Time | <15ns | |
| Overshoot | < 2% | |
| Duty Cycle | 5% (fixed) | |
| Jitter (rms) | 200ps + 30ppm | |



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| Model | MP751061 | MP751062 | |
|-------------------------|---|--|--|
| Pulse | • | | |
| Pulse Width | ≥24 | Ins | |
| Rise / Fall Time | ≥15ns | | |
| Jitter (rms) | 200ps + | · 30ppm | |
| Ramp | · | | |
| Linearity | ≤1% of peak output (typical, | 1kHz, 1 Vpp, 50% symmetry) | |
| Symmetry | 0% ~ | 100% | |
| Arbitrary | - | | |
| Waveform Length | 2 points – 1 | 100K points | |
| Sample Rate | 125MSa/s | 300MSa/s | |
| Amplitude | | | |
| into 50Ω load | | 1mVpp ~ 10Vpp (≤10Hz) 1mVpp ~ 5Vpp (≤60MHz) | |
| DC Offset Range (AD+DC) | ±(10 Vpk – Amplitude Vpp/2) high resis | tance ±(5 Vpk – Amplitude Vpp/2) 50 Ω | |
| DC offset resolution | 1mV or | 4digits | |
| Load Impedance | 50Ω (t | ypical) | |
| DC offset Accuracy | ±(1 % of setting + 1 mV | + amplitude Vpp * 0.5%) | |
| Modulation | | | |
| Туре | AM, FM, PM, PWM, FSK, 3FSK, 4FSK, PSK, ASK, BPSK, OSK, DSB-AM, QPSK, SUM, Sweep Burst | | |
| AM | · | | |
| Carrier Waveform | sine, square, ramp, and | d arbitrary (except DC) | |
| Source | internal / external | | |
| Modulating Waveform | sine, square, ramp, noise | | |
| Depth | 0.0%~1 | 100.0% | |
| Modulating Frequency | 2 mHz ~ | 2 mHz ~100KHz | |
| FM | · | | |
| Carrier Waveform | sine, square, ramp, and | d arbitrary (except DC) | |
| Source | internal / | external | |
| Modulating Waveform | sine, square, ramp, | noise, and arbitrary | |
| Modulating Frequency | 2 mHz ~ | 2 mHz ~100KHz | |
| PM | · | | |
| Carrier Waveform | sine, square, ramp, and | d arbitrary (except DC) | |
| Source | internal / external | | |
| Modulating Waveform | sine, square, ramp, noise | | |
| Phase Deviation | 0° - 180° | | |
| Modulating Frequency | 2 mHz –100KHz | | |
| ASK/FSK/3FSK/4FSK | | | |
| Carrier Waveform | Sine, square, ramp, and arbitrary (except DC) | | |
| Source | Internal | | |



Arbitrary Waveform Generator



| Model | MP751061 | MP751062 |
|-----------------------|---|-------------------------|
| Modulating Waveform | square with 50 | 0% duty cycle |
| Key Frequency | 2 mHz - 1MHz | |
| PSK | | |
| Carrier Waveform | sine, square, ramp, and arbitrary (except DC) | |
| Source | internal / external | |
| Modulating Waveform | square with 50% duty cycle | |
| Key Frequency | 2 mHz - 1MHz | |
| BPSK | | |
| Carrier Waveform | sine, square, ramp, and | d arbitrary (except DC) |
| Source | inte | rnal |
| Modulating Waveform | square with 50% duty cycle | |
| Key Frequency | 2 mHz - | - 1MHz |
| OSK | | |
| Carrier Waveform | sine | |
| Source | inte | rnal |
| Oscillation Time | square with 50% duty cycle | |
| Key Frequency | 2 mHz - 1MHz | |
| DSB-AM | | |
| Carrier Waveform | sine, square, ramp | |
| Source | internal / external | |
| Internal frequency | 2mHz~100kHz | |
| Depth | 0.0%~1 | 00.0% |
| QPSK | | |
| Carrier Waveform | sine | |
| Source | internal | |
| frequency | 2mHz~1MHz | |
| SUM | | |
| Carrier Waveform | sine, square, ramp | |
| Source | internal / external | |
| Internal am frequency | 2mHz~100kMHz | |
| Depth | 0.0%~100.0% | |
| PWM | | |
| Carrier Waveform | pulse | |
| Source | internal / external | |
| Modulating Waveform | sine, square, ramp, noise | |
| Modulating Frequency | 2 mHz ~ 100kMHz | |
| Deviation | 0~min | |
| Pulse train responses | | |
| Carrier | Sine, Square, Pulse, and Arbitrary Waveform (except DC) | |
| | <u> </u> | |



Arbitrary Waveform Generator Multicomp PRO



| Model | MP751061 | MP751062 | |
|--------------------------------------|------------------------------------|--|--|
| Carrier frequency | BW/2 | | |
| Туре | unlimited | unlimited, gated | |
| Gated Source | external | external trigger | |
| Sweep characteristic | | | |
| carrier | sine, square, ramp, and | sine, square, ramp, and arbitrary (except DC) | |
| Minimum / maximum starting frequency | 2m | Hz | |
| Туре | linear, log | linear, logarithmic | |
| Direction | up / d | up / down | |
| Scanning time | 1 ms to 500 | 1 ms to 500 s ± 0.1% | |
| Trigger source | Internal, | Internal, manual | |
| Frequency Counter | | | |
| Function | Frequenc | Frequency, period | |
| Frequency Range | 100mHz ~ | 100mHz ~ 100MHz | |
| Frequency Resolution | 6 di | 6 digits | |
| Input / Output | | | |
| Display | 3.6" 280 × 272 | 3.6" 280 × 2720 pixels LCD | |
| Input mode | external modulation inpu | external modulation input, external trigger input, | |
| Communication Interface | USB Host, USB Device | | |
| Mechanical specifications | | | |
| Size | 200mm (L) × 92mm (H) × 156.2mm (D) | | |
| Weight | 0.8 | 0.8kg | |
| Warranty | 03 ye | 03 years | |















Power Cord

CD Rom

Quick Guide

USB Cable

BNC Cable

BNC to Alligator Clip

Part Number Table

| Description | Part Number |
|--|-------------|
| Arbitrary Waveform Generator, 2 Channel, 30MHz | MP751061 |
| Arbitrary Waveform Generator, 2 Channel, 60MHz | MP751062 |

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