

# AG-Series

## Dual-channel Arbitrary Waveform Generator

- + Advanced DDS technology, max 60MHz frequency output
- + Up to 250MS/s sample rate, and 1μHz frequency resolution
- + Vertical Resolution : 14 bits, up to 1M arb waveform length
- + Comprehensive waveform output : 5 basic waveforms, and 45 built-in arbitrary waveforms
- + Comprehensive modulation functions : AM, FM, PM, FSK, PWM, Sweep, and Burst
- + High-accuracy frequency counter integrated, supported range 100mHz - 200MHz
- + SCPI, and LabVIEW supported
- + 4 inch high resolution (480 × 320 pixels) LCD
- + *could work with OWON SDS Series DSO smoothly*

### + Performance Specifications

| Model               | AG1012  | AG1012F | AG1022 | AG1022F | AG2052F | AG2062F |
|---------------------|---------|---------|--------|---------|---------|---------|
| Channel             | dual    |         |        |         |         |         |
| Frequency Output    | 10MHz   |         | 25MHz  |         | 50MHz   | 60MHz   |
| Sample Rate         | 125MS/s |         |        | 250MS/s |         |         |
| Vertical Resolution | 14 bits |         |        |         |         |         |

### Waveform

|                    |   |
|--------------------|---|
| Standard Waveform  | Sine, Square, Pulse, Ramp, and Noise  |
| Arbitrary Waveform | Exponential Rise, Exponential Fall, Sin(x)/x, Step Wave, and others, total 45 built-in waveforms, and user-defined arbitrary waveform |

### Frequency (resolution 1μHz)

|        |                        |              |              |              |
|--------|------------------------|--------------|--------------|--------------|
| Sine   | 1μHz - 10MHz           | 1μHz - 25MHz | 1μHz - 50MHz | 1μHz - 60MHz |
| Square | 1μHz - 5MHz            |              | 1μHz - 25MHz | 1μHz - 30MHz |
| Pulse  | 1μHz - 5MHz            |              | 1μHz - 10MHz | 1μHz - 15MHz |
| Ramp   | 1μHz - 1MHz            |              |              |              |
| Noise  | 25MHz (-3dB) (typical) |              |              |              |
| Arb    | 1μHz - 10MHz           |              |              |              |

### Amplitude

|                            |   |
|----------------------------|---|
| Amplitude                  | 1mVpp - 10Vpp (50Ω), 1mVpp - 20Vpp (high impedance) |
| Resolution                 | 1m Vpp or 4 digits                                  |
| DC Offset Range (AD+DC)    | ±5V (50Ω), ±10V (high impedance)                    |
| DC Offset Range Resolution | 1mV or 4 digits                                     |

|                |               |
|----------------|---------------|
| Load Impedance | 50Ω (typical) |
|----------------|---------------|

### Arbitrary Waveform

|                     |                 |                 |
|---------------------|-----------------|-----------------|
| Wave Length         | 2 pts to 8K pts | 2 pts to 1M pts |
| Non-volatile Memory | 64M byte        |                 |

### Modulation

|                      |   |                                      |  |
|----------------------|---|--------------------------------------|--|
| Modulation Waveform  | / | AM, FM, PM, FSK, Sweep, and Burst    | AM, FM, PM, FSK, PWM, Sweep, and Burst |
| Modulation Frequency | / | 2mHz to 20.00KHz (FSK 2mHz - 100KHz) |  |

### Cymometer

|                      |   |  |
|----------------------|---|--|
| Function             | / | Frequency Period, +Width, -Width, +Duty, and -Duty |
| Frequency Range      | / | 100mHz ~ 200MHz                                    |
| Frequency Resolution | / | 6 digits/s   |

### Power Amplifier Module (optional)

|                    |        |                           |           |
|--------------------|--------|---------------------------|-----------|
| Input Impedance    | 50 kΩ  | Output Impedance          | <2 Ω      |
| Max Input Voltage  | 2.2Vpp | Gain                      | X 10      |
| Max Output Voltage | 22 Vpp | Offset                    | <7%       |
| Output Slew Rate   | 10V/us | Bandwidth (at full power) | DC 100kHz |
| Max Output Power   | 10 W   |                           |           |

### Input / Output

|                         |  |   |  |
|-------------------------|--|---|--|
| Display                 | 4 inch (480 × 320 pixels) LCD              |   |  |
| Type                    | external reference<br>clock input / output | counter<br>external modulation input ,<br>external trigger input ,<br>external reference clock input / output |  |
| Communication Interface | USB host, and USB device, RS232 (option)   |   |  |

### Mechanical

|                   |                      |
|-------------------|----------------------|
| Dimension (W×H×D) | 235 × 110 × 295 (mm) |
| Device Weight     | 3.00 kg              |

Specifications subject to change without prior notice.

## + Application

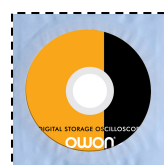
design and debug      circuit function test      education & training

## + Accessories

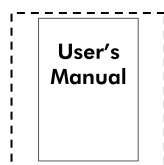
The accessories subject to final delivery.



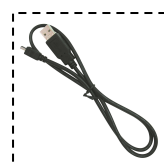
Power Cord



CD Rom



Manual



USB Cable



Q9 Cable