



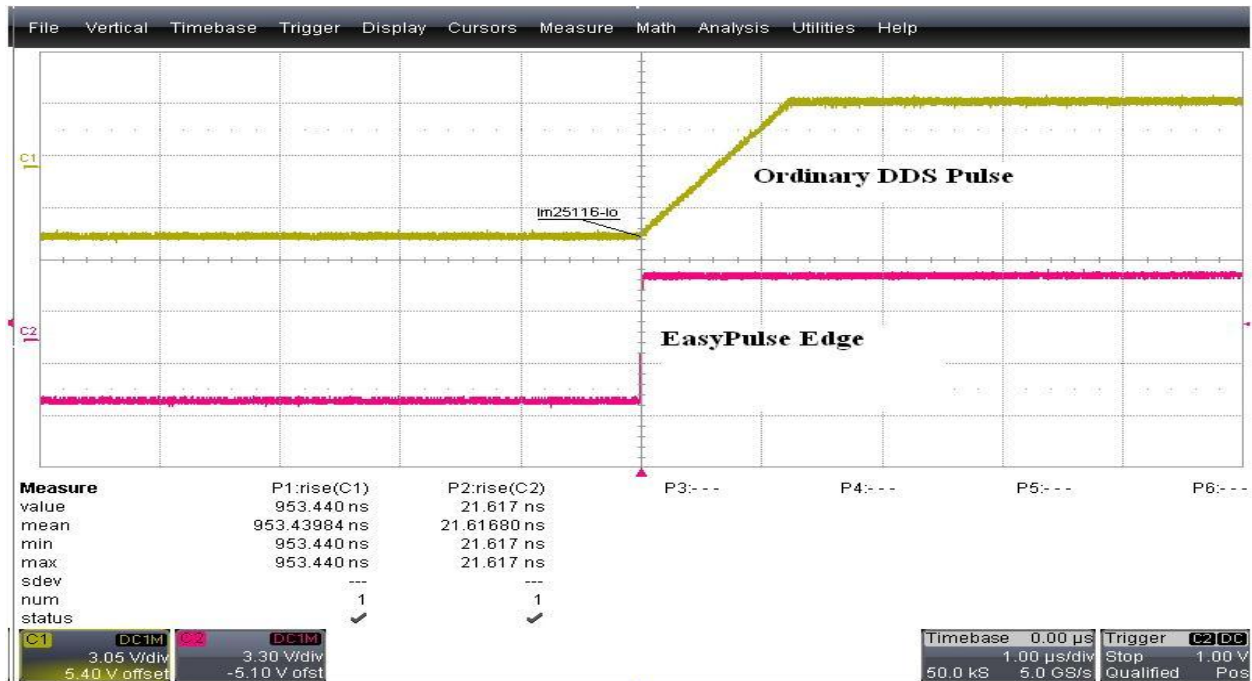
## Product overview:

The SDG800 series function/arbitrary waveform generator family output frequencies up to 5MHz (pulse), 10MHz (square), 30MHz (sine) and have a sampling rate of 125MSa/s. They use the SIGLENT EasyPulse technology which produces low jitter, fast rising/falling edges without being affected by frequency, even at low duty cycle settings, allowing the user a wide range of pulse widths and transition times. This results in a much more versatile generator than other similar DDS designs.

## Main Features:

- Advanced DDS technology, 125MSa/s sampling rate, 14bit vertical resolution
- Single channel output, 5 kinds of standard waveforms, built-in 46 kinds of arbitrary waveforms (including DC)
- Complete modulation functions: AM, DSB-AM, FM, PM, FSK, ASK, PWM, linear/logarithmic sweep and burst
- Innovative EasyPulse technology, can output pulse of low jitter, quick rising/falling edge
- Standard interfaces: USB Device, USB Host, support U-Disk storage and software update
- Provide 10 nonvolatile storage spaces for user's arbitrary waveforms
- Be capable of seamlessly connected to SIGLENT Digital Storage Oscilloscope
- Configurable with powerful arbitrary waveform editing software EasyWave

## Design Features



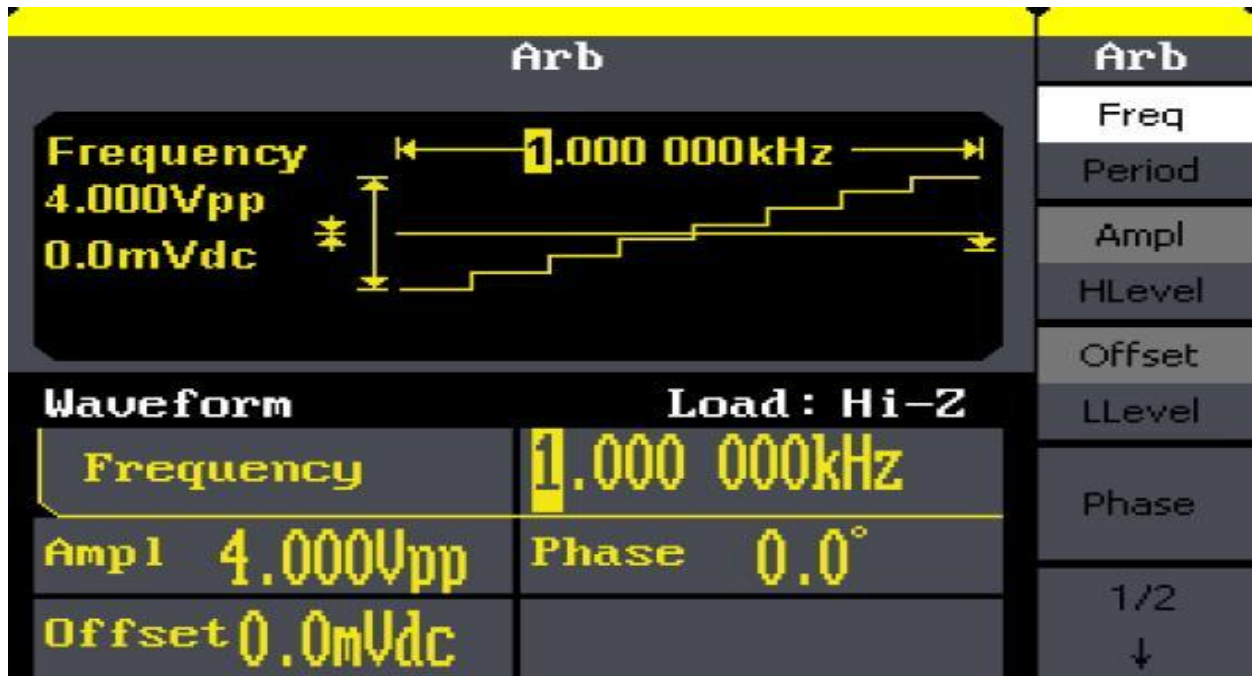
**Figure 1 Comparison of edge under 1KHz pulse signal**

As shown in figure 1, under 1KHz frequency, EasyPulse can keep quick rising/falling edge (20ns) while the edge of ordinary DDS is very slow.



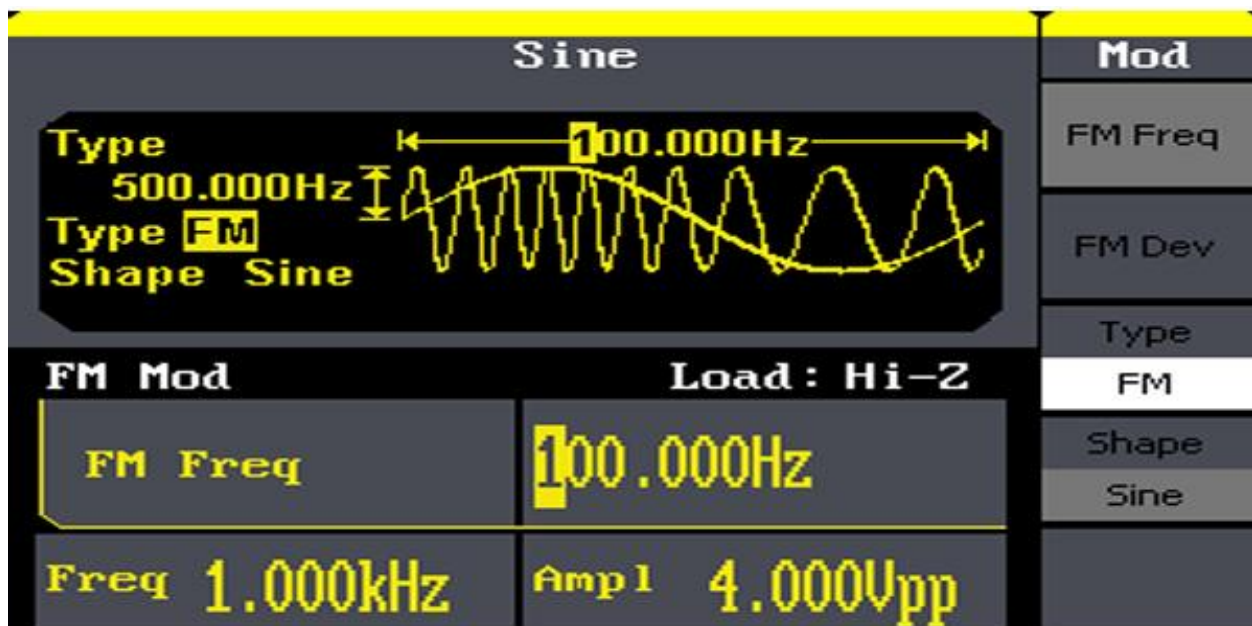
**Figure 2 Comparison of edge adjusting range under 1KHz pulse signal**

As shown in figure 2, EasyPulse edge adjustment has a wide range, while ordinary DDS pulse edge adjustment is limited.



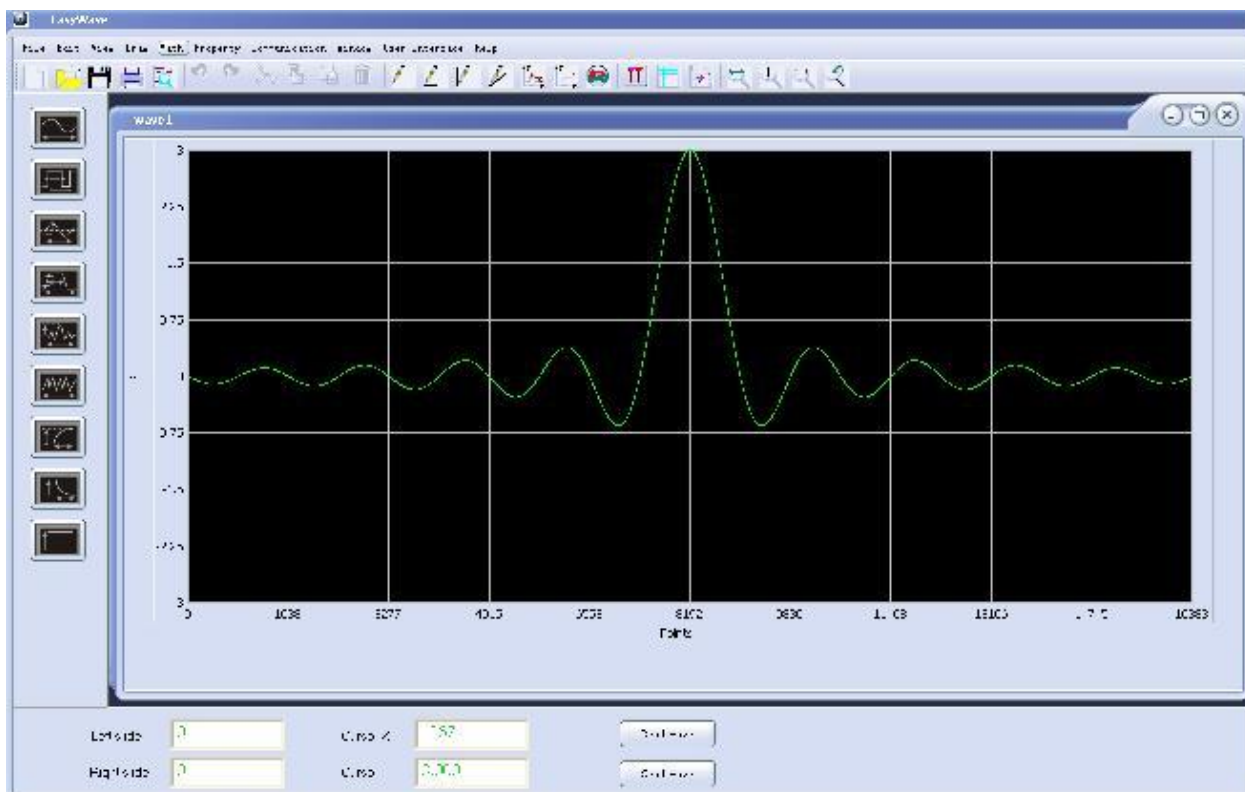
**Figure 3 Built-in 46 kinds of arbitrary waveforms (including DC)**

As shown in figure 3, SDG800 Series can output 5 kinds of standard waveforms and 46 kinds of commonly used waveforms, including common waveforms, mathematical functions, application functions, window functions and trigonometric functions



**Figure 4 Multiple modulation function**

As shown in figure 4, SDG800 Series support multiple modulation function: AM, DSB - AM, FM, PM, FSK, ASK, PWM, linear/logarithmic sweep and burst



**Figure 5 Support PC editing software EasyWave**

As shown in figure 5, SDG800 Series support powerful PC editing software EasyWave, which can output arbitrary waveform featured 14bit vertical resolution and 16Kpts wave length. EasyWave provides 9 standard waveforms: Sine, Square, Ramp, Pulse, ExRise, ExpFall, Sinc, Noise and DC, which meet all engineers' basic needs. In addition, it provides a variety of draw modes like manual drawing, straightline drawing(including horizontal straightline, vertical straightline, point-to-point straightline), coordinate drawing and equation drawing, making it easy to create complex waveforms. Multiple Document Interface management makes simultaneous multiple-waveform editing. SDG800 Series provides 10 nonvolatile storage spaces for arbitrary waveforms, and you can also edit and store more waveforms through EasyWave software.

## Ordering Information:

| MODEL                       | SDG800   |
|-----------------------------|--|
|                             | SDG830 30MHz 2 channel   |
|                             | SDG810 10MHz 2 channel   |
|                             | SDG805 5MHz 2 channel  |
| <b>Standard accessories</b> | A USB cable  |
|                             | A QuickStart Guide   |
|                             | A product qualification certificate                                      |
|                             | Warranty Card  |
|                             | A power cord designed for the instrument and authorized by local country |
|                             | CD (contains EasyScope PC software)                                      |
| <b>Optional accessories</b> | USB-GIPB adapter   |
|                             | Double BNC lines   |