

# GA1022CAL / GA1042CAL / GA1062CAL / GA1102CAL

## GA1000 Series lineup

GA1022CAL - 25MHz, 1Gsa/s, 2 Ch, 40kpts memory

GA1042CAL - 40MHz, 1Gsa/s, 2 Ch, 40kpts memory

GA1062CAL - 60MHz, 1Gsa/s, 2 Ch, 40kpts memory

GA1102CAL - 100MHz, 1Gsa/s, 2 Ch, 40kpts memory

### CHARACTERISTICS

- Industrial power design, stable, reliable, hard maintenance
- A 7-inch widescreen color TFT-LCD display is available in a wide viewing area with the menu
- Various trigger functions, e.g. Slope and Alternation.
- Pass/IF function.
- Two groups of reference waveforms, 16 groups of common waveforms, 20 groups of internal storage and output of CSV and bitmap file by USB flash disc (CSV and bitmap)
- The popup menu display mode realizes more flexible and more natural for users operation
- On-line help system.
- Standard configuration interfaces: 2 USB Host, USB Device, RS-485
- USB Device: support PC connection for remote communication.

### FEATURES

- 1GSa/s Sampling Rate

- 7 Widescreen LCD Color Display

- PictBridge

### APPLICATIONS

- Industrial power design, stable, reliable, hard maintenance

- Circuit debugging

- Repair service

### Accessories:

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## Input

Input coupling AC, DC, GND  
 Maximum input voltage 400V (DC+AC peak value, 1M $\Omega$  input impedance)

## Signal acquisition system

Sampling mode Real-time sampling  
 Storage depth Single channel 40kpts  
 Dual channel 20kpts  
 Average time 4, 16, 32, 64, 128, 256

## Vertical system

Vertical Sensitivity 2mV/div - 5V/div (step 2-5 step)  
 Vertical Resolution 8bit  
 Bandwidth GA1022CAL 25MHz  
 GA1042CAL 40MHz  
 GA1062CAL 60MHz  
 GA1102CAL 100MHz  
 DC measurement accuracy DC measurement accuracy x reading + (1% x vertical displacement reading) + 0.2div  
 Vertical coupling AC, DC, GND  
 FFT Window mode: Hamming Blackman Sampling points : 1024

## Horizontal system

Time base 20ns/div ~ 50s/div (step 1-2-5)  
 Wherein, 100ms/div ~ 50s/div is the scan shift.  
 Display mode YT mode, MX mode  
 Display type Point display or display

## Trigger system

Trigger type Edge, pulse, video, slope, alternation  
 Trigger mode Auto, normal, single  
 Trigger electric level CH1, CH2:  $\pm 10$ div  
 EXT: 1.5V  
 EXT/5:  $\pm 7.5$ V  
 Hold range 100ns ~ 10s

## Trigger system

Video trigger Support signal: NTSC, PAL, SECAM: P  
 Trigger condition: odd field, even field, all rows, specific  
 Alternating trigger CH1 trigger type: edge, pulse, video, slope  
 CH2 trigger type: edge, pulse, video, slope

## Measurement system

Automatic measurement (32 kinds) Maximal value, minimal value, peak amplitude, top value, bottom value, periodic average value, average value, periodic mean square, descend extreme, rise time, period, pulse width, positive pulse width, negative pulse width, positive duty ratio, negative duty ratio

GA1102CAL  
 100MHz

## Control panel

The auto setup function can realize automatic regulation of the horizontal system and the trigger position.

## Hardware frequency counter

Reading resolution ratio 10 bits  
 Signal source All sources capable of being triggered in pulse trigger mode

## Hardware frequency counter

Display type TFT 7-inch (178mm) LCD  
 Display color 64k color  
 Background intensity (typical) 200cd/m<sup>2</sup>  
 Afterglow Off 1 second, 2 seconds, 5 seconds, infinite  
 Screen saver Off 1min, 2min, 5min, 10min, 15min, 20min, 1h, 2h, 5h  
 Screen color mode Normal, inverse phase

