

# Multifunction Digital Storage Oscilloscope



RND 360-00008

## Features

- Including 7 measurement functions in one: oscilloscope, waveform generator, multimeter, FFT spectrum analyzer, frequency counter, protocol analysis, amplitude-frequency curve analysis
- 500 MHz oscilloscope bandwidth, 5GS/s sample rate
- Standard 400M memory depth
- 600,000 wfms/s refresh rate, easy to capture exceptional and low probability events
- Advanced function calculation function
- Standard 50M single-channel arbitrary waveform generator
- A variety of triggers and bus decodes
- Optional multimeter and multimeter data logger function
- Standard Bode plot for loop test analysis
- Multi-interface design: USB Host & Device, LAN, VGA; USB Host supports standard SCPI
- 10.4-inch multi-touch screen



## Performance Specifications

Bandwidth	500MHz
Sample Rate	5GS/s
Horizontal Scale (s/div)	500ps/div - 1000s/div, step by 1 - 2 - 5
Channel	4
Display	10.4 inch LCD touch screen
Record length	400M
Waveform Refresh Rate	600, 000 wfms/s
Vertical Sensitivity	1M $\Omega$ : 1mV/div~ 10V/div; 50 $\Omega$ : 1mV/div ~ 1V/div
Vertical Resolution (A/D)	8bits
Input impedance	1M $\Omega$ ±2%, in parallel with 15pF±5pF
Max input voltage	1M $\Omega$ : 300Vrms, 400V (DC+ Peak AC ≤ 10KHz); CAT II; 50 $\Omega$ : 5Vrms
DC gain accuracy	1 mV = ±3% , other = ±2%
Sampling rate / relay time accuracy	±2.5 ppm max (Ta = +25°C)
Input coupling	DC, AC, Ground
Trigger type	Edge, Video, Pulse, Slope, Runt, Windows, Timeout, Nth Edge, Logic, I2C, SPI, RS232, CAN (optional)
Decoding Type (optional)	RS232, I2C, SPI, CAN
Trigger mode	Auto, Normal, Single
Line/field frequency (Video)	Support standard NTSC, PAL and SECAM
Automatic measurement	Period, Frequency, Mean, PK-PK, RMS, Max, Min, Top, Base, Amplitude, Overshoot, Preshoot, Rise Time, Fall Time, +Pulse Width, -Pulse Width, +Duty Cycle, -Duty Cycle, Delay A→B $\overline{\text{H}}$ , Delay A→ B $\overline{\text{L}}$ , Cycle RMS, Cursor RMS, Screen Duty, FRR, FRF, FFR, FFF, LRR, LRF, LFR, LFF, Phase A→ B $\overline{\text{H}}$ , Phase A→B $\overline{\text{L}}$ , +Pulse Count, -Pulse Count, Rise Edge Count, Fall Edge Count, Area, and Cycle Area.

Waveform math	+ , - , * , / ,FFT, FFTrms, Intg, Diff, Sqrt, User Defined Function, digital filter (low pass, high pass, band pass, band reject)
Waveform storage	100 waveforms
Communication interface	USB Host, USB Device; Trig Out(Pass/Fail); LAN port; VGA port; EXT Trig In
Printer compatibility	PictBridge
Dimension	422 mm × 226 mm × 135 mm (L*H*W)
Weight	Approx. 5 kg (without accessories)

## Arbitrary Waveform Generator Specifications

Max Frequency Output	50MHz
Sample Rate	250MS/s
Channel	1 channel
Amplitude Range	2mVpp - 5Vpp ( $\leq 50\text{MHz}$ ) 2mVpp - 20Vpp ( $\leq 25\text{MHz}$ )
Waveform Length	16K
Standard waveforms	Sine, Square, Ramp, and Pulse
Arbitrary waveforms	Exponential Rise, Exponential Fall, Sin(x)/x, Step Wave, Noise, and others, total 46 built-in waveforms, and user-defined arbitrary waveform

## Multimeter Specifications

Full Scale Reading	Auto Range ✓
Measure	Voltage, Current, Capacitance, Resistance, Frequency, Duty cycle, Continue, Diode test
Capacitance	2nF – 20mF: $\pm(4\% \pm 10\text{digit})$
Voltage	DCV: 20mV, 200mV: $\pm(0.5\% \pm 10\text{digit})$ , 2V, 20V, 200V: $\pm(0.3\% \pm 5\text{digit})$ , 1000V: $\pm(0.5\% \pm 5\text{digit})$ ACV: 200mV, 2V, 20V, 200V: $\pm(0.8\% \pm 10\text{digit})$ 750V: $\pm(1\% \pm 10\text{digit})$ Frequency : 40Hz-1000Hz
Current	DCA: 20A: $\pm(2\% \pm 10\text{digit})$ ; ACA: 20A: $\pm(2.5\% \pm 10\text{digit})$
Impedance	200 $\Omega$ ~2M $\Omega$ : $\pm(0.8\% \pm 10\text{digit})$ , 20M $\Omega$ : $\pm(1\% \pm 10\text{digit})$ 100M $\Omega$ : $\pm(5\% \pm 10\text{digit})$

## Included Accessories



Art Nr.  
RND 360-00008