

## DQ8000 SERIES

### DIGITAL OSCILLOSCOPE

#### Features

- .4 channel oscilloscope
- .2GSa/s sampling rate and 50GSa/s equivalent sampling rate
- .1024k recording length
- .5.7" color LCD display
- .USB-host/device and option LAN, GPIB interface



DQ8104

Technical Data	DQ8104	DQ8204	DQ8304
Sampling rate	2G Sa/s (4 channels total)		
Equivalent sampling rate	25G Sa/s	50G Sa/s	50G Sa/s
<b>Display</b>			
Type	5.7" rectangle color LCD		
Backlight intensity	300 ni		
Display resolution	320 horizontal x 240 vertical pixels		
<b>Vertical system</b>			
Sensitivity and accuracy	2mV/div~5V/div		
Vertical resolution	8 bit		
Width of band (-3dB)	DC (AC5Hz) 0~100MHz	DC (AC5Hz) 0~200MHz	DC (AC5Hz) 0~300MHz
Selectable analog bandwidth limit	100MHz		
Rise time	≤3.5ns	≤1.8ns	≤1.2ns
DC gain Accuracy	±4%(2mV/div), ±3%(5mV/div~5V/div)		
DC measurement accuracy	±(3%+0.1div)(2mV/div), ±(3%+0.1div)(5mV/div~5V/div)		
Voltage different (Δt) measurement accuracy	±(3%+0.05div)		

<b>Horizontal system</b>	
SEC/DIV range	5ns~50ns/div), at 1-2-5 increment
Waveform interpolation	Sin(x)/x
Recording length	1024k
Storage depth	24k(Max.)
Equivalent storage depth (Dual time base)	60M
Sampling rate and delay time accuracy	± 50ppm (any time interval ≥ 1ms)
Delta time measurement accuracy	Single: ± (1 sampling time interval + 50ppm x rdg. + 0.6ns) Average values: ± (1 sampling time interval + 50ppm x rdg. + 0.4ns)
<b>Trigger system</b>	
Mode	Auto, normal, single
Type	Edge, pulse, video, alternate
Hold off range	96ns~1.5s
Math	+ , - , x , ÷ FFT
<b>Acquire input</b>	
Input coupling	DC, GND, AC
Input impedance	1MΩ±2% 16pF±3pF
Probe attenuation	1x, 10x, 100x, 1000x
Max. input voltage	400V (DC+AC peak)
<b>Measurement</b>	
Cursor	Voltage difference (V) between cursors Time difference (T) between cursors Reciprocal of T in Hz (1/T)
Auto-measure	Vrms, Vavg, Vp-p, Vmax, Vmin, Vtop, Vhigh, Vlow, Vmid, Vamp; Period, Freq, Rise, Fall, +Width, -Width, +Duty, -Duty, Delay
Saving waveforms	10 groups of waveforms and 10 setups
<b>I/O</b>	
Standard	USB(D), USB(H)
Options	GPIB, LAN
<b>Calibrator</b>	
Output voltage	3V≥( 1MΩ load)
Output frequency	1kHz
<b>Digital multimeter characterizes</b>	

DC voltage	Range	400.0mV/4.000V/40.00V/400.0V
	Accuracy	±(1%+5digits)
AC voltage (40Hz~400Hz)	Range	400.0mV/4.000V/40.00V/400.0V
	Accuracy	±(1.2%+5digits)
Resistance	Range	400Ω/4kΩ/40kΩ/400kΩ/4MΩ/40MΩ
	Accuracy	±(1.5%+5digits)
On/off	<70.0Ω	
Diode	Forward voltage drop 0.5~0.8V	
DC current	Range	4mA/40mA/400mA
	Accuracy	±(1%+5digits)
	Range	4A
	Accuracy	±(1.5%+5digits)
Power source	100~240VACrms, 45~440Hz; 50VA Max; CAT II	
Dimensions (W x H x D)	336mm x 117mm x 174mm	
Weight	3.8kg	
Accessories	Operation manual, adapter, probex 2, multimeter penx2, current-voltage convertor modulex 2	