

DOMTM

Digital Oscilloscope Meter WENS 800 Series

20MHz / 40MHz / 60MHz / 100MHz / 200MHz

Max 2GS/s Real Sample Rate
5GS/s Repetitive Sample Rate
Deep Record Length
DATA Logger
6000 Count True RMS DMM



WENS
Alternative Graphing Power

SPECIFICATIONS

MODEL	820	840	860	800X	800 Z
OSCILLOSCOPE					
BANDWIDTH / SAMPLE RATE	20 MHz	40 MHz	60 MHz	100 MHz	200 MHz
	Real Sampling 100MS/s per Channel, 200 MS/s Single Channel			Max Real Sample 1GS/s	
	with 2.5 GS/s Repetitive Sampling			with 5 GS/s Repetitive Sampling or (option) 2GS/s	
INPUT					
Input Channels	2 Channels				
Input Coupling	DC, AC, GND				
Input Impedance	1M Ω $\pm$ 1%, 20pF $\pm$ 3pF				
Probe Attenuation	x1, x10				
Max Input	300V (direct input) 600V (through 10:1 Probe)				
VERTICAL					
Vertical Resolution	8-Bit				
VOLTS/DIV Range	5 mV/div ~ 100 V/div (1, 2, 5 Step)				
Offset (Position)	$\pm$ 5 div from center				
Vertical Accuracy	$\pm$ 3%				
HORIZONTAL					
SEC/DIV Range	50 ns/div ~ 50 s/div	10 ns/div - 50 s/div		5 ns/div - 50 s/div	
Time Base Accuracy	$\pm$ 0.01%				
Position Range	Pre-Trigger : 20div max. Post-Trigger : 1000div				
Delay Resolution	1/250 of screen diameter				
Delay Accuracy	0.04 divisions				
Delta Time Measurement Accuracy	$\pm$ 3%				
Modes	Main, XY				
XY	Yes				
Horizontal Pan and Zoom	Yes				
TRIGGER					
Sources	Channel A and B				
Modes	Normal, Single, Roll, Auto Trigger				
Advanced Selections	Edge, Pulsewidth, Pattern, Video				
Edge	Trigger on a rising or Falling edge of any source				
Pulsewidth	Trigger on a positive or negative pulsewidth of any source larger than, less than, equal to or not equal to duration width 200 nS 10S				
TV	525/NTSC, 625/PAL, Source A, CHA, CHB, Even field, Odd field, Line # select				
TV Sensitivity	0.7 div trigger level				
Auto Scale	Yes				
Range	$\pm$ 10 div from center of screen				
Level Accuracy	$\pm$ 0.4 divisions				
Level Resolutions	500 pixels				
Sensitivity	DC 5 MHz - 0.5 div 1.5 divisions				
Noise Reject Mode	Yes				
Coupling Modes	DC : DC Coupled trigger AC : AC Coupled trigger cutoff frequency < 1HZ HF-Reject : > 50 KHz LF-Reject : > 30 KHz Noise Reject : 3 times the DC coupled limits				
ACQUISITION					
Real-Time Sample Rate	100 MS/s per Channel	200MS/s single channel, 100MS/s per channel		(option) 1GS/s Single Channel 2GS/s Single Channel 500MS/s Per Channel or 1GS/s Per Channel	
Waveform Interpolation	Dot, Linear, Sine, Pulse				
Record Length	125 Kbytes/channel				
Acquisition Mode	Sample, Peak Detect, Envelope, Average				
Peak Detection	10 ns				
Average	2 - 256				
Vertical Resolution	8 bit				
Same Rate Accuracy	100 ppm				
Minimum Sample Rate	100 MS/s (250 ns to 50S/div)				
MEASUREMENT					
Automatic Measurement	Peak-to-peak, Max, Min, Amplitude, Top, Base, Positive/Negative Overshoot, Preshoot, RMS Mean, One Cycle Mean, Frequency Period, + Width, - Width, + - Duty Cycle, Rise time, Fall Time, Phase.				
Waveform Math	CHA + CHB, CHA - CHB, CHB -CHA				
Cursors	Delta V Voltage				
Delta V	Voltage diff between cursors				
Delta T	Time difference between cursors				
FFT	Model 840/860/800X/800Z/800ZA				
Windows	Rectangular, Hamming, Hanning, Blackman-Harris				
Amplitude Display	Variable dB (1/ 5/ 10/ 20dB)				
Maximum Frequency	1.25 GHz				
FUNCTIONS					
Save / Recall	10 Waveforms, 10 Settings				
Zoom	Direct Time / Volt conversion				
XY Mode	X Axis Channel Input - Y Axis Channel Input				

SPECIFICATIONS

MODEL	All Models
MULTIMETER	
COUNTS	Autorangeing 6000 Count, 3 5/6 digit with analog Bargraph display
DC VOLTAGE	
Range	600mV - 1000V
Accuracy	$\pm(0.3\% + 10 \text{ digit})$
Input Impedance	10 Mohm
Overload Protection	1,000v DC or AC Peak within 10 Seconds
AC VOLTAGE (True RMS)	
Range	6V - 600V / 30KHZ, True RMS
Accuracy	$\pm(0.75\% + 10 \text{ digit})$ at 50 - 1KHz $\pm(2.0\% + 10 \text{ digit})$ at 1KHz - 30 KHz
Overload Protection	1,000v DC or AC Peak within 10 Seconds
RESISTANCE	
Range	600 ohm - 60M ohm
Accuracy	600 ohm - 6M ohm $\pm(0.5\% + 10 \text{ digit})$ 60 Mohm $\pm(1.0\% + 10 \text{ digit})$
Overload Protection	250V DC or AC Peak within 10 Seconds.
CAPACITANCE	
Range	60 nF - 300 uF
Accuracy	$\pm(2.0\% + 10 \text{ digits})$
OTHER MEASUREMENTS	
Diode Check	Accuracy : 2%
Continuity	less than 60 ohm, Buzzer Sound
dBm (Adjustable)	Reference Value 2,4,8,16,50,75,93,110,125,135,150,300,600,900,1000,1200
MIN / MAX / AVG	Records Minimum, Average and Maximum readings with Time Stamping
Temperature, % Relative Humidity, High-Current, Pressure	Through external adapter
DISPLAY	
Display Device	3.8", 320x240 Mono LCD with Backlight
Display Contrast	Adjustable
Persistence Mode	Channel and Math function are displayed dimmer for previous Acquisition.
OPERATION	Rotary Encoder, 18Keys
USABILITY & SUPPORTABILITY	
USB Flash memory host	Option
USB for PC Interface	USB 2.0 Client
Self Test	Power on Test, Diagnostic Test
Self Calibration	Failure message, Calibration Abort, Calibration Factor, Non-Volatile Factors
Help system User Interface	
Firmware Update	Updating Instrument Firmware via USB Port
Dimensions & Weight	
107mm(W) x 220mm(H) x 55mm(D) / 4.2" x 8.3" x 2.2", 1.2kg / 2.6 lbs Net meter	
POWER	
Power Adapter : DC12V/1A with Internal charger(820/840/860), DC 9V/2A with Internal charger(800X/800Z)	
NIMH Rechargeable Battery Pack : 7.2V /2800MAH(820/840/860), 2.4V/4500MAH(800X/800Z)	



Meter CAT II 1000V DC
CAT III 600V
Oscilloscope CAT III 600V (via 10:1 probe)
CAT III 300V (Direct Input)

STANDARD ACCESSORIES		OPTIONAL ACCESSORIES		
Description	QUANTITY	PRODUCT	NUMBER	DESCRIPTION
Power adapter and charger	1	Temp Adapter	9050	Temp Adapter (°C / °F)
Battery Pack	2	Current Adapter	8CA	AC 1000A
User's Manual	1		8ADC	AC/DC 1000A
Scope Probe (x10r x10) 600VRMS CAT III	2	Carrying Bag	8CB	Deluxe Carrying Bag with shoulder
Test Lead (Red, Black) 1000V DC CAT III	1	USB Flash Memory	8F	USB Flash Memory Internal
Holster case	1	(Host)		System & Port (USB Host)
USB Interface Package	1			

specifications subject to change without notice.

WENS

A ISO 9001 Certified Manufacturer.

WENS Precision Co., Ltd.
203-701, Buchon Techno-Park, Yakdae-Dong, Wonmi-Gu,
Bucheon-City, Gyunggi-Do, Korea, 420-733
Tel : +82 32 621 1500 Fax : +82 32 621 1505
E-mail : wens@wens.co.kr website : www.wens.co.kr



Distributor