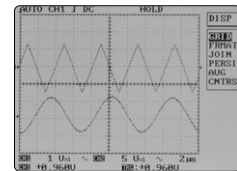


OS-310M



100 MHz, 2channel
 Digital Storage Oscilloscope



4000 count Digital Multimeter

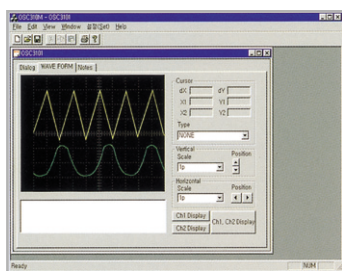
FEATURES

- 100MHz bandwidth
- Fast rise time and low overshoot
- Repetitive random interleaved 5GS/s
- Two channels and dual digitizers
- Low drift and internal noise
- Excellent internal noise reduction
- External trigger
- Built-in 3- 3/4(4,000 counts) digital multimeter with auto or manual range
- Roll mode
- Pre - trigger up to 10 div
- Extra bright backlit LCD display
- Independently floating isolated scope and DMM for safety
- Automatic optimized panel setting and tracking according to input signal
- Automatic measurements
- Arithmetic function
- RS-232C Programmability / Communication
- Rechargeable Ni-Cd battery and external AC adapter
- Direct hardcopy through RS-232C
- Hand free design and deluxe soft carrying case
- Third Party CE(Safety and EMC) approval
- Hands free automatic test

Software & Accessories(Optional)

■ FEATURES

- Measurement & calculation : Vp-p, BMS, Mean Frequency, Rise T, fall T, Period, Width, Duty



- On/Off display of waveforms
- Vertical position control
- Time/div control
- Trigger mode, source, couple, slope and position control
- Grid control
- Vertical magnification
- Waveforms save, recall, edit and print
- Different color display of each channel
- Cascade or Tile to arrange multiple opened windows

■ OPERATING ENVIRONMENT

- 1) Composition
 - RS-232C Interface Cable • Software(3.5" disk) • Operation Manual
- 2) Hardware
 - CPU : 4860 × 2 or better • Memory : 8M for full Functionality
 - Disk space : 5.0M byte or over • Operation Manual
- 3) Software : Operating System : Window 95



- **Other options** : Thermal Printer, Rechargeable battery, Carrying case, RS-232C cable(9 to 25)

Specifications

Description			Specification				
VERTICAL AXIS	Resolution		8bits				
	Sensitivity		1mV / div ~ 5V / div(1-2-5 sequence, 12 Steps)				
	Accuracy		3% (5% for 1mV, 2mV)				
	Bandwidth		DC ~ 100MHz (-3dB)				
	Low frequency limit in AC couple		10Hz				
	Input channel		CH1, CH2				
	Input impedance		1M Ω / approx. 25pF				
	Mode		CH1, CH2 turned on or off independently				
Max safe input volts		42Vpk (DC +AC peak at 1KHz)					
HORIZONTAL AXIS	Max. sample rate		Real time 25MS/s(simultaneous on 2 channels) Repetitive 5GS/s(simultaneous on 2 channels)				
	Acquisition memory		2k words / CH				
	Sweep time	Equivalent sample	5ns / div ~ 2 μ s / div				
		Real time sample	5ns / div ~ 0.5s / div				
		Roll mode	1s / div ~ 5s / div				
Timebase error		1%					
Pre - trigger		MAX. 10div					
TRIGGER	Source		CH1, CH2, EXT				
	Mode		Auto, Norm, TV - V, TV - H				
	Couple		DC, AC, HF rej, LF rej				
	Slope		+ OR -				
	Level		Manual setting or automatic 50% setting				
	Sensitivity			TRIGGER	FREQUENCY	SENSITIVITY	
						5mV ~ 5V / div	1mV, 2mV / div
				CH1	DC ~ 10MHz	0.5div	2.5mVp-p
				CH2	10 ~ 100MHz	1.5div	7.5mVp-p
			EXT	DC ~ 100MHz	0.1Vp-p		
	TV trigger		Sync. section : 1.0div or more, negative				
AC cut off frequency		Approx. 10Hz (-3dB)					
HF / LF cut off frequency		Approx. 50kHz (-3dB)					
Auto lower frequency		Approx. 30Hz					
MENU	Display		5"-STN LCD(CCFI back light), 320 X 240 pixel 10div(H) X 8div(V), 25 X 25 dots / div(V), grid(full, quad, board) interpolation(sine, linear) dot join on/off, persistence, X-Y Horizontal mag/alt mag				
	Save / Recall		Average(exponential 2~256) save / recall max. 10 waveforms & Set - up clear waveform. set- up				
	Math	Parameter	Amplitude(p-p, rms, average), frequency, period, pulse width (positive, negative), duty cycle				
		Arithmetic	addition, subtraction, inversion				
	Utility		Probe(X1, X10) LCD contrast dec / inc, RS-232C				
CURSOR		ΔV , ΔT , ΔI /T reference, track					
AUTO SET- UP &TRACKING		The front panel settings are automatically performed so that the optimum waveform is displayed for an input signal freq:20Hz~20MHz, duty:20~80%, amplitude:10mV~50V (20mV or more for 20 to 100Hz)					
HOLD / RUN		Hold mode is used to stop the updating of the waveform, run mode to update repeatedly					
HARDCOPY		Hardcopy through RS-232C interface					
RESUME		The setup data before power off and all the displayed information are retained. At power on these data are displayed and used as setup data.					
DMM	DIGIT	3-3/4 (4,000 counts)					
	AC / DC VOLTAGE	RANGE	400mV	4V	40V	400V	
		RESOLUTION	0.1mV	1mV	10mV	100mV	
	RESISTANCE	RANGE	400	4k	40k	400k	
		RESOLUTION	0.1	1	10	100	
OTHERS		Diode test, continuity test, min., max., relative, hold					
CALIBRATION OUT	Frequency		1kHz \pm 20%				
	Output voltage		0.5V \pm 30%				
POWER SUPPLY	Power supply		Exclusive AC adaptor, built - in battery Rated external input voltage : 12V Power consumption for external power input : 1A(Typ)				
	Power consumption		12W (Typ)				
	Built - in battery		Ni-Cd Battery, Automatically rechargeable (Voltage drop is automatically detected)				
	Operation		80 Min. (Typ)				
	Recharge time		15Hours(Typ) (at power off), 30Hours(Typ) (at power on)				
AMBIENT CONDITION	Specification		+10 $^{\circ}$ C ~ +35 $^{\circ}$ C (when automatic calibration performed with in the range of 25 \pm 5 $^{\circ}$ C)				
	Operation		0 $^{\circ}$ C ~ +40 $^{\circ}$ C, 45 ~ 80%				
	Storage		-10 $^{\circ}$ C ~ +60 $^{\circ}$ C, 35 ~ 85%				
OTHERS	Dimension		180(W) \times 67(H) \times 255(D)mm				
	Weight		2.0kg				