

# Oscilloscope



## Features:

- 200MHz high bandwidth with 2 channels
- 200MSPS real time sampling rate
- 50GSPS equivalent time sampling rate
- Multi-language support, easy to use
- USB2.0 interface, no external power required
- 23 measurement functions, PASS/FAIL check, FFT
- OS: Windows NT, Windows 2000, Windows XP, Windows 7
- Labview/VB/VC SDK

## Specifications:

	Model	72-10170
Acquisition	Sample Mode	Real-Time Sample
	Sample Rate	200MSPS
	Average	N acquisitions, all channels simultaneously, N is selectable from 1-128
Input	Input Coupling	DC, AC, GND
	Input Impedance	Resistance: 1M $\Omega$ ; Capacitance: 25pF
	PP-80,PP-150,PP-200 Probe Attenuation	10X
	Probe Attenuation Factors	1X, 10X
	Maximum Input Voltage	35Vpk (DC + peak)
Horizontal	Scanning Speed Range(Sec/Div)	4ns/div ~ 1h/div(1-2-4 sequences)
	Sample Rate and Delay Time Accuracy	$\pm 50$ ppm( any interval $\geq 1$ ms )
	Wave form Interpolation	Step, Linear, Sin(x)/x
	Memory Depth(Sample Points)	10K : available all timebase; 14K : 40 $\mu$ s/div-400ms/div(Dual channel); 20 $\mu$ s/div-400ms/div(Signal channel); 32K : 40 $\mu$ s/div-400ms/div (Single channel)
Vertical	Analog Bandwidth	60MHz (-3dB)
	A/D converter	9 bit resolution
	Vertical Scale(Volt/div) Range	10mV ~ 10V/div @ x1 probe(1,2,5 sequence); 100mV ~ 100V/div @ x10 probe
	Position Range	$\pm 4$ division
	Selectable Analog Bandwidth Limit(typical)	20MHz
	Lower Frequency Response(-3dB)	$\leq 10$ Hz(at input BNC)
	Rise Time at BNC(typical)	$\leq 1.7$ ns
	DC Gain Accuracy	$\pm 3\%$



# Oscilloscope



<b>Trigger</b>	Trigger Source		CH1,CH2, EXT
	Trigger Mode		Auto, Normal and Single
	Trigger Type		Edge trigger: Rising edge, falling edge.
	Trigger Sensitivity		0.02 div increments
	Trigger Level Range		±4V
	Trigger Level Accuracy		±4 division
	Edge Trigger Slope		Rising, Falling
	Pulse Width Trigger		Trigger Condition: Trigger when <, >, =, or ≠; Positive pulse or Negative pulse Pulse Width Range: Selectable from 20ns to 10s
<b>Measurement</b>	Cursor Measure		Amplitude difference between cursors ( $\Delta V$ ); Time difference between cursors ( $\Delta t$ ); Reciprocal of $\Delta t$ in Hertz ( $1/\Delta t$ ) (Cross, Trace, Horizontal, Vertical)
	Auto Measure	Voltage	Vp-p, Vmax, Vmin, Vmean, Vamp, Vtop, Vbase, Vmid, Vrms, Vcrms, Preshoot, Overshoot
		Time	Frequency, Period, Rise Time(10%~90%), Fall Time(10%~90%), Positive Width, Negative Width, Duty Cycle
	Temperature		Operating: 0°C to 40°C Non-operating: -20°C to +60°C)
<b>Environmental</b>	Cooling Method		Forced air
	Humidity		Below +35°C, ≤90% relative humidity; +35°C to +40°C, ≤60% relative humidity
	Altitude		Operating: 3,000m or below; Non-operating: 15,000m or below
	Size		190mm(L)×100mm(W)×35mm(H)
<b>Mechanical</b>	Heavy		Without Packaged 0.29kg; Packaged 0.9kg;
	Probe		X1, X10 two passive probes. The passive probes have a 6MHz bandwidth (rated 100Vrms CAT III) when the switch is in the X1 position, and a maximum bandwidth (rated 300Vrms CAT II) when the switch is in the X10 position. Each probe consists of all necessary fittings
<b>Accessories</b>	USB Line		A USB A-B line, used to connect external devices with USB-B interface like a printer or to establish communications between PC and the oscilloscope.
	Installation CD		A software installation CD and it also contains the user manual for the Tenma Oscilloscope.

## Part Number Table

Description	Part Number
Oscilloscope, PC, 2 Channel, 200MHz	72-10170

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