

100/70 MHz DIGITAL STORAGE OSCILLOSCOPE

DSO-5100/5070

FEATURES

- 100/70 MHz : 2 Channel models ;
- 100/70 MHz : 2 Channel models
- 1GSa/s Maximum Sampling Rate
- 10M Maximum Memory Depth For Each Channel
- 7" 800 x 480 WVGA LCD Display
- 65536 Color , TET Screen
- 1Mpts FFT Frequency Domain Signal Display
- I²C/SPI/UART/CAN/LIN Serial Bus Trigger and Decoding Functions
- Zero Key Function For Horizontal Time, Vertical Voltage and Triggering
- Compact and Innovative Exterior Design



APPLICATIONS

- Educational Market - General Purpose Instruction
- Industrial Sector - Fundamental R&D Measurement Applications



The series digital storage oscilloscopes equip with 100/70 MHz : 2 Channel models; 100/70 MHz : 2 Channel models, that provide entry level users with diversified selections. The maximum real time sampling rate can be up to 1GSa/s. The robust functional performance makes the economical oscilloscope more colorful and allows entry level users to sumptuously enjoy the fun and value brought by test and measurement which is precisely the emerging mission of the test and measurement industry that Megatekworks relentlessly to achieve.

10M memory depth for each channel yields exquisite measurement results and allows each retrieved waveform to successfully reveal the details of signal. Engineers are often baffled by failing to retrieve signal details when measuring basic electric circuit signals. Now, DSO-5100series oscilloscopes, with 10M memory depth for each channel, are capable to uncover all signal details.

7" 800 x 480 WVGA LCD display and the 65536 color gradient display function together allow the DSO-5100Series to distinctly display waveform details in gradients while measuring fast changing analog signals. Additionally, 50,000wfms/s waveform update rate helps engineers clearly understand the gradients of signal variations and easily identify the problem of transient signal variations.

1Mpts FFT signal display makes the frequency domain display function more delicate. Engineers can clearly observe the distributed details of frequency domain signals. Smooth and rapid response can even better locate where the problems are originated. Powerful FFT function realizes high efficient spectrum analysis measurement which is indispensable for technology and education arenas.

The series provides serial bus analysis function with 10M long memory depth. Users can trigger, decode, and analyze frequently used I²C, SPI and UART serial bus and CAN/LIN bus, which is often used by automotive communications.

The Series oscilloscopes provide the zero key function for vertical voltage scale adjustment, horizontal time scale adjustment and trigger level adjustment. When processing complicate waveform adjustment and observation, engineers often require the zero key function to start a new measurement, adjust waveform or reset trigger level. The zero key function can reduce time in turning control knobs that is a great benefit for engineers.



SPECIFICATIONS



		DSO-5100	DSO-5070	
VERTICAL	Channels	2 + EXT	2 + EXT	
	Bandwidth	DC -100 MHz-(3db)	DC -100 MHz-(3db)	
VERTICAL	Calculated Rise Time	3/5 nS	5 nS	
	BandWidth Limit	12MHz	12MHz	
	Vertical Sensitivity Resolution	8 bit : 5 mV~div 5V/div		
	Input Coupling	AC, DC, GND		
	Input Impedance	1M Ω //20pF approx.		
	DC Gain Accoracy*	\pm 3%		
	Polarity	Normal & Invert		
	Maximum Input Voltage	400Vrms, CAT I 400 V (DC + AC , PK - PK)		
	TRIGGER	Trigger level range	Internal \pm 5 div from the screen center , EXT \pm 1.6 V , EXT/5 \pm 8 V	
		Trigger level Accuracy (typical)	Internal \pm 0.3 div , EXT \pm (8 mV + 6% of Set Value) , EXT/5 \pm (40 mV + 60% of Set Value)	
Trigger displacement		According to Record length and time base		
Trigger Holdof range		100 ns - 10 s		
HORIZONTAL	Time base Range	2ns/div ~1000s/div (1-2.5 increments)		
	Pre-trigger	10 div maximum		
	Timebase Accuracy	\pm 50 ppm over any \geq 1 ms time interval		
	Real Time Sample Rate	1GSa/s max.		
	Record Length	Max.		
	Acquisition Mode	Normal, Average, Peak Detect, Single		
	Peak Detection	2nS (typical)		
CURSORS AND MEASUREMENT	Cursors	Δ V , Δ T , Δ T & Δ V between cursors , auto cursor		
	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 \rightarrow B $\frac{\mu}{s}$, Delay A \rightarrow B $\frac{\mu}{s}$, Cycle RMS, Cursor RMS, Screen Duty, Phase +Pluse Count, -Pluse Count, Rise Edge Count, Fall Edge Count, Area, and Cycle Area		
DISPLAY	TFT LCD Type	7" TFT WVGA color display		
	Display Resolution	800 horizontal \times 480 vertical pixels (WVGA)		
	Display Mode	YT , XY		
INTERFACE	USB Port	USB 2.0 High-speed host port x1, USB High-speed 2.0 device port x1		
	Ethernet Port(LAN)	RJ-45 connector, 10/100Mbps with HP Auto-MDIX (Only for 4 channel models.)		
	Go-NoGo BNC	5V Max/10mA TTL open collector output		
	Kensington Style Lock	Rear-panel security slot connects to standard kensington-style lock		
POWER SOURCE		AC 100V ~ 240V , 50Hz ~ 60Hz , Auto selection , Power consumption:15 Watts		
MISCELLANEOUS	Multi-Language Menu	Available		
	Operation Environment	Temperature : 0°C ~ 50°C. Relative Humidity \leq 80% at 40°C or below; \leq 45% at 41°C ~ 50°C		
	Online Help	Available		
DIMENSIONS& WEIGHT		143(W) \times 158/5 (H) \times 330/5 (D)mm, Approx. 1/77 Kg		

ORDERING INFORMATION

DSO-5100 100MHz, 2 channels, Digital Storage Oscilloscope
DSO-5070 70MHz, 2 channels, Digital Storage Oscilloscope

ACCESSORIES

User manual CD x 1, Power cord x 1, Software, prob*2

Megatek

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