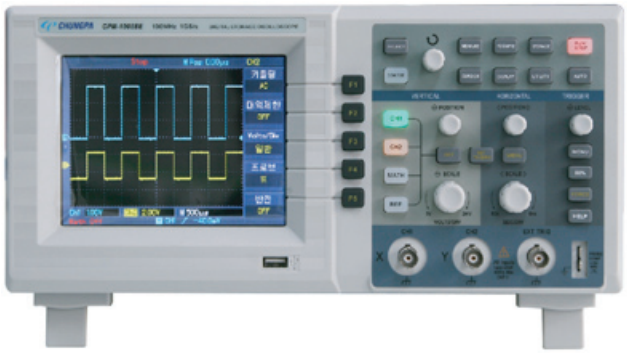
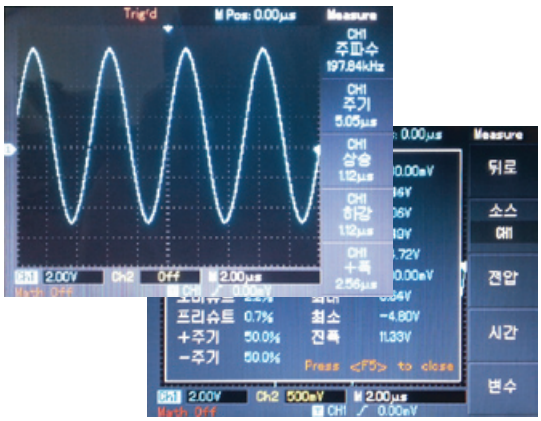
CPM-1005BE / CPM-2005BE

Digital Storage Oscilloscope



FEATURES

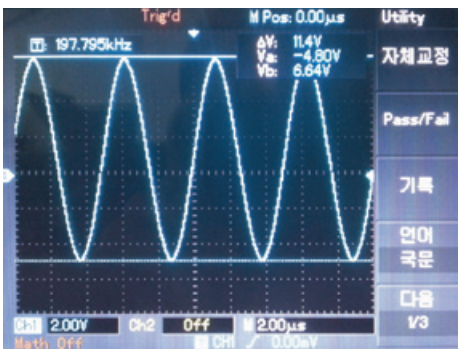
- Frequency bandwidth: 100MHz (CPM-1005BE) and 200MHz (CPM-2005BE)
- Sampling rate: Real-time 1G Sa/s
- 5.7" Full Color TFT LCD screen (320 x 240)
- Built-in FFT Analyzer and AUTO waveform
- RS232C basic communication and USB real-time communication
- Dual analog input measurement function
- Dual display tracking function
- Auto Trigger and Sweep mode
- Supports a USB memory stick in Plug & Play (USB 2.0 Host)



INTRODUCTION

The CPM-1005BE and CPM-2005BE are low-cost digital storage oscilloscopes for schools and industrial fields. The storage function of the digital storage oscilloscopes enable saving data in internal memory as well as USB memory using USB 2.0 Host on the front side. The rear side comes with a trigger output terminal and an USB 2.0 system port. For the USB 2.0 system port, we provide standard accessories such as USB cables and Communication & Control Software (USB/RS-232C).

The CPM-1005BE and CPM-2005BE feature a well-organized display of input sources on the LCD screen. They also feature user-friendly functions such as automatic measurement, calibration and reset so that you can use very easily. The digital storage oscilloscopes do have multilingual capabilities in eight languages.



CPM-1005BE / CPM-2005BE

You can use a Cursor function to have a closer look at a selected waveform. For accuracy of your waveform analysis, you can make as many pop-up windows as you want.

The Communications & Control Software can connect the PC through a USB 2.0 system port. With reciprocal communication between the DSO and the PC, you can observe, capture, save and analyze the waveforms on the computer in real time. You can save the obtained data in "pdf" or "bmp" format so that you can make use of it for your report or presentation.

Data collection by Communication & Control Software

The Communication & Control Software can collect and save the measured data using a PC-based data logging function. Also, it displays and analyzes the measured data in real time.

STANDARD ACCESSORIES

- Power cord: 1ea
- Probe: 2ea (1x, 10x)
- DSO Communication & Control Software (USB/RS-232C): 1ea
- User's guide manual: 1ea

SPECIFICATIONS

Model	CPM-1005BE	CPM-2005BE
Technical Indicators		
Bandwidth	100MHz	200MHz
Rise time	≥3.5ns	≥1.8ns
Sampling range	1GS/s	
Vertical sensitivity	2mV~5V/div	
Maximum record length	1M	
Sampling rate	Real-time 1GS/s, Equipment 50GS/s	
Input		
Input coupling	DC, AC, GND	
Input impedance	1±2% MΩ in parallel with 24pF ±3pF	
Probe attenuation	1X, 10X, 100X, 1000X	
Maximum input voltage	400V (DC + AC Peak, 1 MΩ input impedance)	
Time delay between channels	150ps (typical)	
Horizontal		
Waveform interpolation	Sin (x) / x	
Accuracy of sampling rate and delay time	±100ppm (any time interval ≥1ms)	
Time interval (△T) Measurement accuracy (full bandwidth)	Single: ± (1 sampling time interval + 100ppm x reading + 0.6ns) >16 average values: ± (1 sampling time interval + 100ppm x reading + 0.4ns)	
Scan time base	5ns ~ 50s/div	2ns ~ 50s/div
Vertical		
A/D converter	8-bit resolution, simultaneous two-channel sampling	
Deflection factor VOLTS/DIV range	2 mV/div ~ 5 V/div at input BNC	
Position range	≥ ± 10 div	
Selectable analog bandwidth limit (typical)	20MHz	
Low frequency response (AC coupling, -3dB)	≥ 10 Hz at BNC	
DC gain accuracy	When vertical sensitivity is 2mV/div, 5mV/div: ±4% (sample or average sampling mode); When vertical sensitivity is 10mV/div~5V/div: ±3% (sample or average sampling mode	
DC measurement accuracy (Average sampling mode)	When vertical position is zero and N ≥16: ± (4% x reading + 0.1 div + 1mV) and 2mV/div or 5mV/div is selected; ± (3% x reading + 0.1 div + 1mV) and 10mV/div~ 5V/div is selected. When vertical position is not zero and N ≥16: ± (3% x(reading + vertical shift reading) + (1% x vertical shift reading)] + 0.2div). Set from 2mV/div to 200mV/div plus 2mV; Setup value > 200mV/div to 5V/div plus 50mV.	
Voltage difference (△V) Measurement accuracy (Average sampling mode)	Under identical setup and environmental conditions, the voltage difference (△V) between two points of the waveform after the average of ≥16 waveforms acquired waveforms is taken: ± (3% x reading + 0.05 div)	
Trigger		
Trigger type	Edge, Pulse, Video and Alternate	
Trigger level	Internal ±5 div from the centre of the screen EXT : ± 3V EXT/5 : ± 15V	
General information		
Automatic waveform measurement	28ea	
Communication port	RS-232C port and USB port (Host / System)	
Arithmetic operation	Add / Subtract / Multiply / Divide / Reverse / FFT	
Display	5.7" full color LCD 320 X 240 (64K)	
AC power input (RMS)	100V ~ 240VAC, 45Hz ~ 440Hz, CAT II	
Dimension	320(W) x 130(D) x 150(H) mm	
Field applications	Education, R&D, assembly line and industrial control	