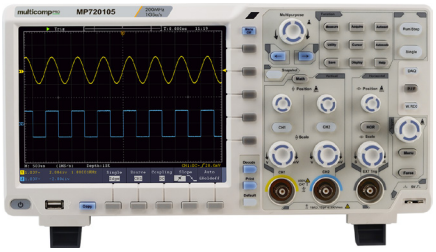
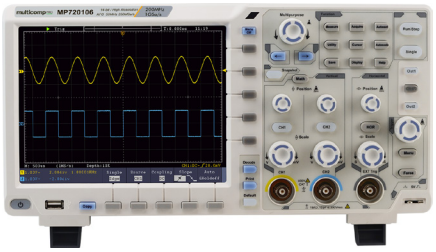
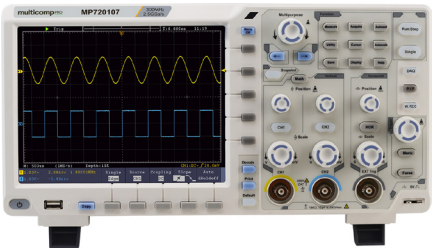
2 Channel Digital Storage Oscilloscopes

Performance Specifications

Characteristics	MP720105 / MP720105 US	MP720106 / MP720106 US	MP720107 / MP720107 US
Bandwidth	200MHz	200MHz	300MHz
Sample Rate	1GS/s	1GS/s (8 bits) 500MS/s (12 bits) 100MS/s (14 bits)	2.5GS/s
Vertical Resolution (A/D)	8 bits	14 bits	8 bits
Record Length	40M		
Waveform Refresh Rate	75,000 wfms/s		
Horizontal Scale (s/div)	1ns/div - 1000	1ns/div - 1000	1ns/div - 1000
	Step by 1 - 2 - 5		
Rise Time (at Input, Typical)	≤1.7ns		≤1.17ns
Channel	2 + 1 (external)		
Display	8″ Colour LCD, 800 × 600 pixels		
Input Impedance	1MΩ ± 2%, in parallel with 15pF ±5pF	50Ω ±2%, in parallel with 15pF ±5pF	
Channel Isolation	50Hz : 100 : 1, 10MHz : 40 : 1		
Max. Input Voltage	1MΩ ≤ 300Vrms; 50Ω ≤ 5Vrms		
DC Gain Accuracy	±3%	±1.5%	±3%
DC Accuracy	Average≥16: ±(3% reading + 0.05 div) for ΔV		
Probe Attenuation Factor	0.001X - 1000X, Step by 1 - 2 - 5		
LF Respond (AC, -3dB)	≥10Hz (at input, AC coupling, -3dB)		
Sample Rate / Relay Time Accuracy	±1ppm		
Interpolation	sin(x) / x		
Interval (ΔT) Accuracy (full bandwidth)	Single: ±(1 interval time + 1ppm x reading + 0.6ns); Average > 16: ±(1 interval time + 1ppm x reading + 0.4ns)		
Input Coupling	DC, AC, and GND		
Vertical Sensitivity	1mV/div to 10V/div (at input)		
Trigger Type	Edge, Video, Pulse, Slope, Runt, Windows, Time Out, Nth Edge, Logic, I2C, SPI, RS232, and CAN		
Bus Decoding	I^2C, SPI, RS232, and CAN		
Trigger Mode	Auto, Normal, and Single		
Vertical Range	±2V (1mV/div - 50mV/div), ±20V (100mV/div - 1V/div), ±200V (2V/div - 10V/div)		

Line / Field Frequency (video)		NTSC, PAL and SECAM Standard
Cursor Measurement		ΔV, and ΔT between cursors, ΔV and ΔT between cursors, and auto- cursors
Automatic Measurement		Vpp, Vavg, Vrms, Freq, Period, Week RMS, Cursor RMS, Vmax, Vmin, Vtop, Vbase, Vamp, Overshoot, Phase, Preshoot, Rise Time, Fall Time,+Width, -Width, +Duty, -Duty, Duty Cycle, Delay A→B ↑, Delay A→B↓, +Pulse Count, -Pulse Count, Rise Edge Count, Fall Edge Count
Waveform Math		+, -, ×, ÷, FFT, FFTrms, Intg, Diff, Sqrt, User Defined Function, digital filter (low pass, high pass, band pass, band reject)
Waveform Storage		100 waveforms
Lissajou's Figure	Bandwidth	Full Bandwidth
	Phase Difference	±3 degrees
Communication Interface		USB host, USB device, USB port for PictBridge, Trig Out (P/F), LAN, and VGA (MP720106 and MP720107I)
Frequency Counter		Available
Power Consumption		<15W
Fuse		2A, T class, 250V
Battery (optional)		3.7V, 13200mAh
Power Supply		100V AC to 240V AC, 50/60Hz, CAT II
Dimension (W × H × D)		340mm × 177mm × 90mm
Weight		2.6kg ±200g

Multimeter (MP720106 only) Specifications

Full Scale Reading	3-3/4 digits (max 4000 count)
Input Impedance	10MΩ
Capacitance	51.2nF - 100μF: ±(3% ± 3 digits)
Voltage	V DC: 400mV, 4V, 400V: ±(1 ± 1 digit); Max. input: DC 1000V V AC: 4V, 40V, 400V: ±(1 ± 3 digits); frequency: 40Hz - 400Hz; Max input: AC 400V (virtual value)
Current	DC: 40mA, 400mA: ±(1.5% ± 1 digit); 10A: ±(3% ± 3 digits) AC: 40mA: ±(1.5% ± 3 digits), 400mA: ±(2% ± 1 digit), 10A: ±(3% ± 3 digits)
Impedance	400Ω: ±(1% ± 3 digits),4KΩ - 40MΩ: ±(1% ± 1 digit)
Diode	<50 (±30) beeping
Continuity Test	0V to 1V

Arb Waveform Generator Specifications (MP720106 only)

Max. Frequency Output	25MHz
Sample Rate	125MS/s
Channel	Available in 1-ch, or 2-ch
Vertical Resolution	14 bits
Amplitude Range	2mVpp - 6Vpp
Waveform Length	8K
Standard Waveform	Sine, Square, Pulse, Ramp

VGA	VGA+AV (MP720106 and MP720107)
TOU	Touch screen (capacitor-type) (MP720106 and MP720107)
WIF	WiFi (MP720106)
AWG	ARB waveform generator (MP720106)
DMM	Digital Multimeter (MP720106)

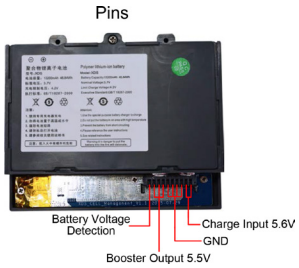
Decoding Kit Included

MP720105, MP720106 and MP720107

RS232	RS232
SPI	SPI
I2C	I^2C
CAN	CAN trigger / decoding

Accessories Included : Power Cord, USB cable, Probes, Probe Adjust Tool, CD-Rom and Manual
Power Cord Plug Type : UK/EU, US
Standard Warranty : 03 years

Polymer Lithium-ion Battery



Battery Specification Table

Characteristics	Item	Values
Li Battery	Capacity	13200mAh 48.84Wh
	Nominal Voltage	3.7V
	Limited Charge Voltage	4.2V
Protective Circuit	Charge Voltage	⩽4.2V
	Charge Current	⩽3A
	Discharge Voltage	2.8V ⩽ Voltage ⩽ 4.2V
	Discharge Current	⩽7A
Charging Management	Charge Voltage Input Range	4.2V to 10V
	Rated Charge Voltage	5.6V
Battery Booster	Rated Output Voltage	5.5V ± 2%
	Output Voltage Ripple (20MHz)	⩽100mVpp
	Output Current	⩽4A
System	Charging Time	8 hours approximately
	Discharging Time	3.5 hours approximately
Operating Temperature	Charging Temperature	0°C to +45°C
	Discharging Temperature	-20°C to +60°C
	Storage Temperature	-10°C to +45°C
Dimension	119.2mm × 97.2mm × 25.7mm (L × W × T)	
Weight	371.9g	

Part Number Table

Description	Part Number
Dual Channel Digital Storage Oscilloscope, 200MHz, 8-bits	MP720105
Dual Channel Digital Storage Oscilloscope, 200MHz, 14-bits	MP720106
Dual Channel Digital Storage Oscilloscope, 300MHz, 8-bits	MP720107
Polymer Lithium-ion Battery for Oscilloscopes (MP720105, MP720106 & MP720107)	MP720417
Dual Channel Digital Storage Oscilloscope, 200MHz, 8-bits	MP720105 US
Dual Channel Digital Storage Oscilloscope, 200MHz, 14-bits	MP720106 US
Dual Channel Digital Storage Oscilloscope, 300MHz, 8-bits	MP720107 US
Polymer Lithium-ion Battery for Oscilloscopes (MP720105, MP720106 & MP720107)	MP720417 US