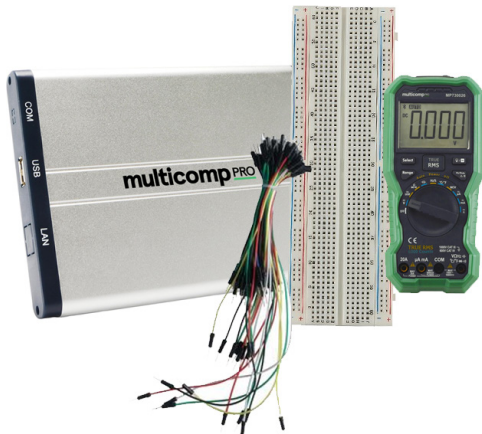


# Standard Breadboard Kit multicom<sup>PRO</sup>

RoHS  
Compliant



## Handheld With Bluetooth

### Features

- 3 5/6 bit resolution
- Data Logger, Multimeter and Thermometer function
- True RMS test supported
- BLE 4.0 wireless transmission, more stable, less power consumption
- Build-in offline record function
- Chart and Diagram mode helps to analyse the data tendency
- Support NCV non-contact voltage sense
- Widely supported on Android, iOS and Windows

Parameters		Measurement Range	Resolution	Accuracy
DC Voltage		60.00mV / 600.0mV (EU)	0.01mV	±(0.5%+2 dig)
		600.0mV / 6.000V / 60.00V / 600.0V	0.1mV	
		1000V	1V	±(0.8%+2 dig)
AC Voltage		6.000V / 60.00V / 600.0V	1mV	±(0.8%+3 dig)
		750V	1V	±(1%+3 dig)
DC Current	µA	60.00µA / 600.0µA	0.01µA	±(0.8%+2 dig)
	mA	60.00mA / 600.0mA	0.01mA	
	A	20.00A	0.01A	±(1.2%+3 dig)
AC Current	µA	60.00µA / 600.0µA	0.1µA	±(1%+3 dig)
	mA	60.00mA / 600.0mA	0.01mA	
	A	20.00A	0.01A	±(1.5%+3 dig)
Resistance		600.0Ω / 6.000kΩ / 60.00kΩ / 600.0kΩ / 6.000MΩ	0.1Ω	±(0.8%+2 dig)
		60.00MΩ	0.01MΩ	±(2%+3 dig)
Capacitance		60.00nF / 600.0nF / 6.000µF / 60.00µF	0.01nF	±(2.5%+3 dig)
		600.0µF / 6.000mF / 60.00mF	0.1µF	±(3%+5 dig)
Frequency		9.999Hz / 99.99Hz/999.9Hz / 9.999kHz / 99.99kHz / 99.9kHz / 9.999MHz	0.001Hz	±(0.8%+2 dig)
Duty Ratio		0.1% to 99.9% ( typical value: Vrms=1V, f=1kHz)	0.1%	±(1.2%+3 dig)
		0.1% to 99.9% (≥1kHz )		±(2.5%+3 dig)
Temperature (°C/°F)		- 50°C to +400°C	1°C	±(2.5%+3 dig)
		-58°F to +752°F	1°F	±(4.5%+5 dig)
Display		5999		
Frequency Response		(40Hz to 1000Hz)		
Shift Rate		3 times/s		

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multicom<sup>PRO</sup>

# Standard Breadboard Kit **multicomp** PRO

## Characteristics

Bluetooth Module	√
True RMS	√
Diode Test	√
Auto Power-off	√
On-off Warning	√
Low-battery Indicator	√
Data Hold	√
Relative Measurement	√
Flashlight	√
Auto Ranging	√
LCD Backlight	√
Automatic-manual Range Selection	√
Input Protection	√
Input Impedance	≥10MΩ
Safety Compliance	600V CATIV, 1000V CATIII
NCV	√
Dimension (W×H×D)	196mm × 88.5mm × 56mm
Weight (without package)	0.3kg
Standard Accessories Included	Multimeter Lead, K-type Thermocouple, Manual, Bolt Driver, Alligator Clip
Optional Accessories	9V Battery
Warranty	12 months

## Based Oscilloscope, 25Mhz, 2Ch

### Features

- Up to 100MHz bandwidth, and max. 1GS/s real-time sample rate
- 2 Channels
- Max 10M record length
- Friendly UI : FFT, or X-Y, and waveform 2 views displayed on the same screen
- Multi-trigger option: edge, video, slope, pulse, and alternate
- USB isolation - less signal interference, more PC protection
- USB bus powering, and LAN remote control (optional)
- Ultra-thin body design, easy portability
- SCPI supported
- LabVIEW supported (only in MP720019 US)

### Oscilloscope Specifications

Parameters	10AH2399
Bandwidth	25MHz
Channel	2 Analogue, 1 Ext Trigger
Sample Rate	100MSa/s

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**multicomp** PRO

# Standard Breadboard Kit **multicomp** PRO

Parameters		10AH2399
Horizontal Scale (s/div)		5ns/div ~ 100s/div, step by 1~2~5
Rise Time		≤14 ns
Record Length		5K
Input Coupling		DC, AC, GND
Input Impedance		1MΩ±2%, in parallel with 10pF ±5pF
Channels Isolation		50Hz : 100 : 1, 10MHz : 40 : 1
Max Input Voltage		40V (PK - PK) (DC+AC, PK - PK)
DC Gain Accuracy		±3%
DC Accuracy		Average≥16: ±(3% reading + 0.05div) for ΔT
Probe Attenuation Factor		1X, 10X, 100X, 1000X
LF Respond (AC, -3dB)		≥5Hz (at input, AC coupling, -3dB)
Sampling Rate / Relay Time Accuracy		150ps
Interpolation		sin(x) / x
Interval (ΔT) Accuracy (full bandwidth)		Single: ± (1 interval time + 100ppm × reading + 0.6ns), Average >16: ±(1 interval time + 100ppm × reading + 0.4ns)
Vertical Resolution (A/D)		8 bits (2 channels simultaneously)
Vertical Sensitivity		5mV/div ~ 5V/div
Trigger Type		Edge, Pulse, Video, Slope, and Alternate
Trigger Mode		Auto, Normal, and Single
Trigger Level		±5 divisions from screen center
Acquisition Mode		Sample, Peak Detect, and Average
Line / Field Frequency (video)		NTSC, PAL, and SECAM standard
Cursor Measurement		ΔV, and ΔT between cursors
Automatic Measurement		Vpp, Vmax, Vmin, Vtop, Vbase, Vamp, Vavg, Vrms, Overshoot, Preshoot, Freq, Period, Rise Time, Fall Time, Delay A→B ↗, Delay A→B ↘, +Width, -Width, +Duty, -Duty
Waveform Math		+, -, ×, ÷, invert, FFT
Lissajous Figure	Bandwidth	Full bandwidth
	Phase Difference	±3 degrees
Communication Interface		USB 2.0
Multi-function Interface	Signal Type	Synchronized input / output, Pass / Fail, external trigger input
	Level Standard	TTL
Power Supply		5.0V/1A
Power Consumption		≤1.5W
Dimensions (W × H × D)		170mm × 120mm × 18mm
Device Weight		0.26 kg
Standard Accessories Included		USB Cable, CD-Rom. Manual, Probes, Probe Adjust Tool
Optional Accessories		Soft bag
Warranty		12 months

# Standard Breadboard Kit multicomp<sup>PRO</sup>

## Jumper Wire Assortment With Tips, 65 Pieces

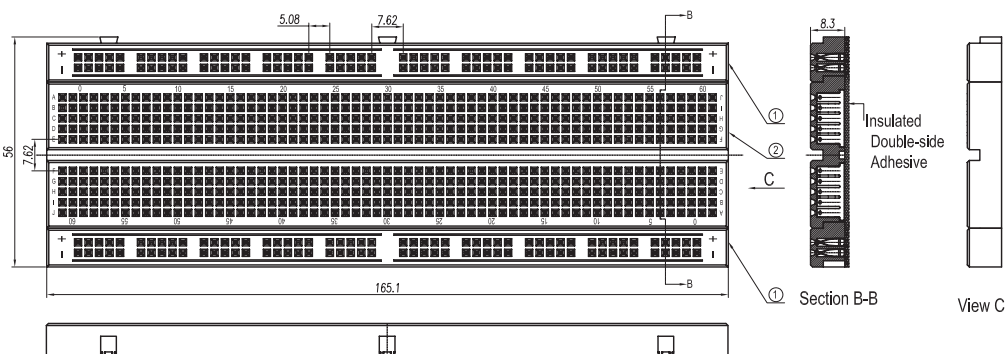
### Specifications:

65 pcs of 22 AWG Jumper Wire  
Line of different colours can be re-used  
Lengths and Quantity : 100mm 45pcs.  
150mm 10pcs.  
200mm 5pcs.  
250mm 5pcs.

## Solderless Breadboard

### Specifications:

Pitch : 2.54mm  
Terminal Strips : 630 Tie-point  
Distribution Strips : 200 Tie-point  
Rated Voltage / Current : 300V / 3 to 5A  
Insulation Resistance : 500MΩ / DC500V  
Withstanding Voltage : 1,000V AC / 1 minute  
Wire Range : 29AWG to 20AWG  
Temperature Range : -25°C to +80°C  
Strip Length : 7mm to 8mm



1. Terminal Strip
2. Distribution Strips

Dimensions : Millimetres

## Part Number Table

Description	Part Number
Standard Breadboard Kit : Breadboard + Jumpers + PC Based Scope + DMM	STANDARD BREADBOARD KIT.

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