## MS100 Digital Oscilloscope

# текпека

### **Product Datasheet**

Tekneka MS100 is a powerful single-channel digital oscilloscope/true RMS multimeter that comes with a bandwidth of 10MHz | AC/DC 999.9V ranges. Its compact size, 2.8" IPS color display, easy-to-use interface, and compliance with the latest industrial safety regulations (CAT IV 600V, CAT III 1000V) make it an excellent choice for users. Users can observe the real-time acquisition of waveforms in oscilloscope mode, which allows them to adjust the trigger cursor, vertical voltage position, waveform, voltage scale, and AC/DC coupling. In multimeter mode, it can measure voltage, capacitance, resistance, temperature, and frequency. It features a USB-powered rechargeable battery, PC connectivity, an oscilloscope input terminal, and a ground/signal terminal.

#### **Features**

- 2.8" IPS color display helps to analyze the real-time waveform
- Function key F1 to F4 to select multiple options and settings
- Users can hold the measurements and save them in internal memory
- Easy to switch b/w oscilloscope and multimeter mode
- The menu key navigate to system options with multiple setting pages
- Oscilloscope/multimeter mode has an auto-ranging options
- Frequency, peak-to-peak voltage, and max voltage measurement are available
- REL relative value measurement in multimeter mode
- Battery status, time base/scale, voltage, trigger level, and running status are displayed in the oscilloscope mode
- Two point calibration option is available to make adjustments
- Type C USB port for charging & data export as images (.bmp)



#### **Oscilloscope Specifications**



Description	Options	Ranges					
Bandwidth		10MHz					
Sampling	Real-time sample rate	48mSa/s					
Oscilloscope Channel	1						
Input	Coupling	AC/DC					
	AC/DC Max voltage	150V					
	Resistance	1MΩ, @16pf					
	Probe attenuation	1X, 10X					
Horizontal	Sample rate range	1.5Sa/s-48MSa/s					
	Waveform interpolation	(sinx)x					
	Sweep speed range	50ns/div -20s/div					
	Time base accuracy	20ppm					
	Record length	Max 64Kbyte					
Vertical	Sensitivity	20mV/div -10V/div					
	Displacement range	4 cells (positive and negative)					
	Analog bandwidth	10MHZ					
	Low frequency response	>10HZ					
	Rise Time	<10ns					
	DC Gain accuracy	±3%					
Measurement	Auto	Period, frequency, peak-to-peak value, maximum value, minimum value, effective value					
Trigger	Method	Auto, normal, single					
	Trigger edge	Rising edge, falling edge					

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## Product Datasheet

Description	Ranges	Accuracy
DC Voltage	9.999mV to 999.9V	±(0.05%+3)
AC Voltage	9.999mV to 750.0V	±(1.0%+3)
DC Current	999.9mA to 9.999A	±(1.0%+3)
	9999µA to 99.99mA	±(0.8%+3)
AC Current	999.9mA to 9.999A	±(1.2%+3)
	9999µA to 99.99mA	±(1.0%+3)
Resistance	99.99Ω	±(1.0%+3)
	999.9Ω to 999.9kΩ	±(0.5%+3)
	9.999MΩ	±(1.5%+3)
	99.99MΩ	±(3.0%+5)
Capacitance	9.999nF	±(5.0%+20)
	99.99nF to 999.9µF	±(2.0%+5)
	9.999 to 99.99mF	±(5.0%+20)
Frequency (Measures only up to 100kHz under the ACV setting)	99.99Hz to 999.9kHz	±(0.1%+2)
Temperature	-20 to 1000°C	±(2.5%+5)
Diode	Up to 3.000V	
Continuity	Meter beeps at < 50Ω	

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General Specifications	
Display (LCD)	9999 Counts
Ranging	Auto/Manual
Update Rate	3 times/second
Safety Rating	CAT IV 600V, CAT III 1000V
True RMS	
Data Hold	
Backlight	
Low Battery Indication	
Auto Power Off	
Built Material	ABS
Operating Temperature	0 to 40°C, <75%RH
Dimension	177 x 89 x 40mm
Weight	Net: 345g/Gross: 697g

Frequency response of AC Current/Voltage: 40Hz-1kHz

#### Applications

The electrical and electronic industries, the education sector, the production sector, the maintenance service providers, the building sector, the automobile industry, the electronics service sector, the smartphone sector, the oil and gas sector, the electrical inspectors, and many other businesses use Tekneka MS100.

#### **Packing Includes**

- 2 x Test Leads
- Oscilloscope Probes Set
- Temperature Probe
- Type C USB
- User Manual
- Carrying Pouch

#### **Ordering Info**

MS100......Digital Oscilloscope MS100-TL....Pair of Test Leads MS100-SP....Oscilloscope Probes Set MS100-TP....Temperature Probe

