

# High Voltage Differential Probe

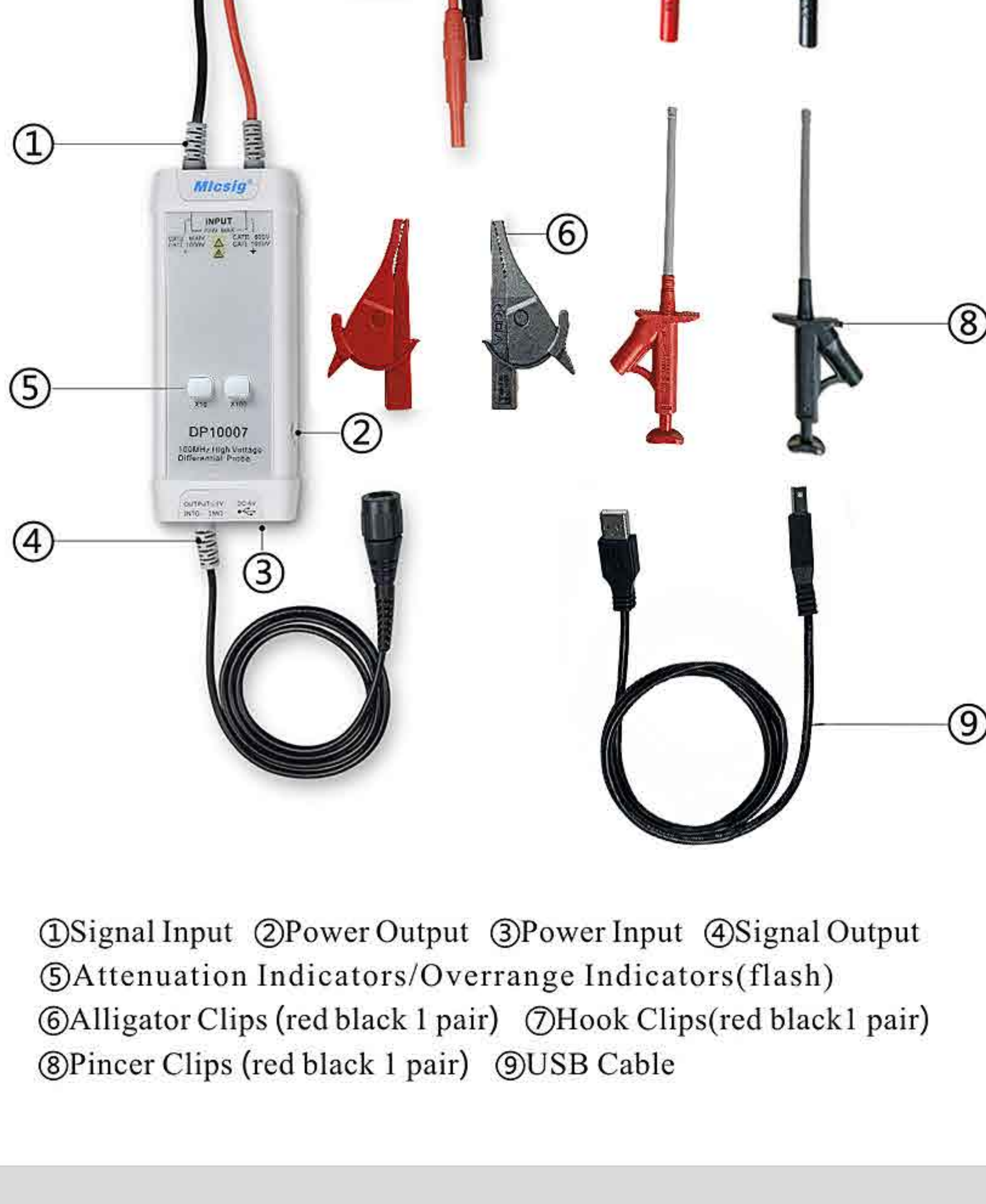
## DP10007



### Specification

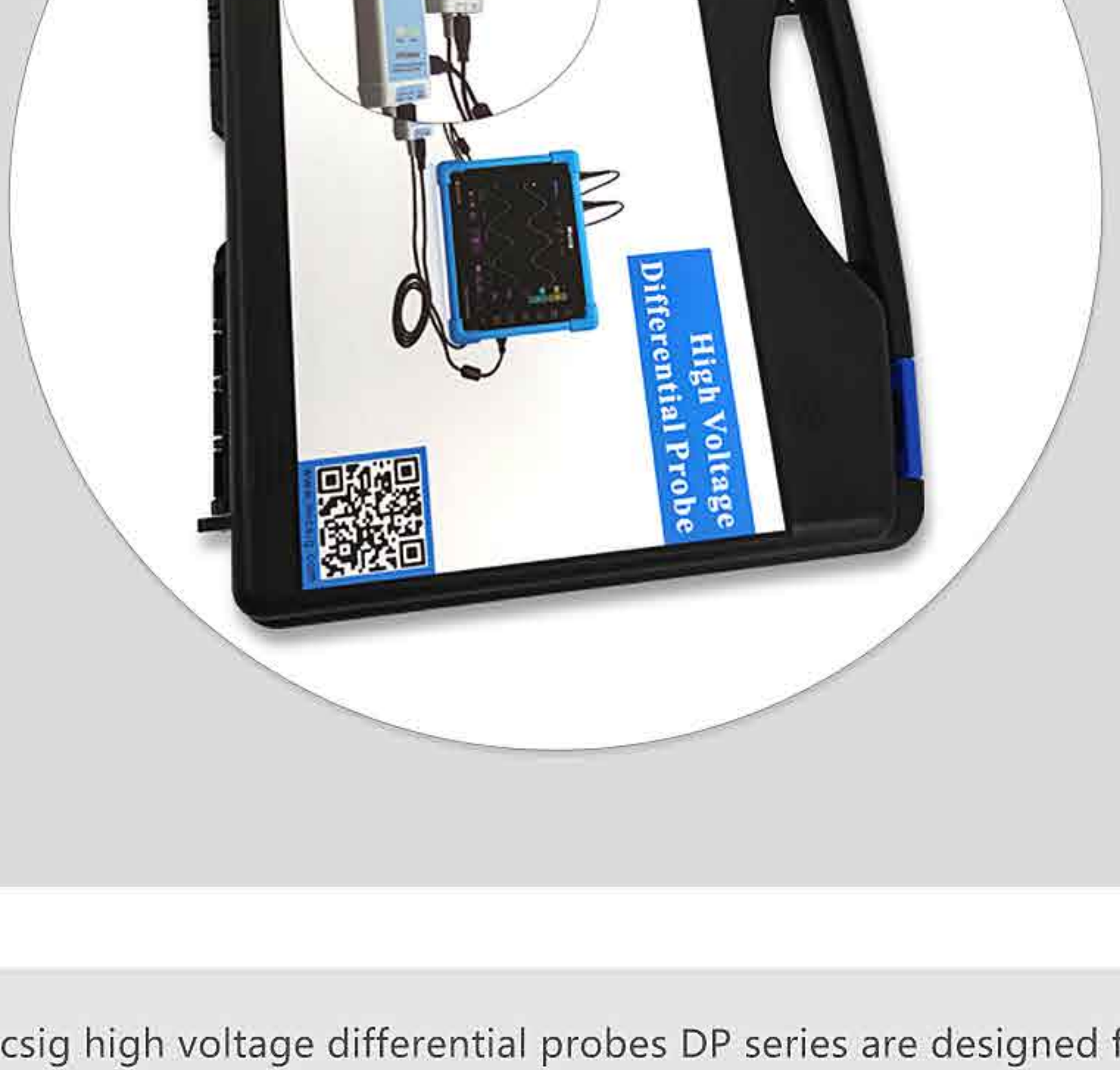
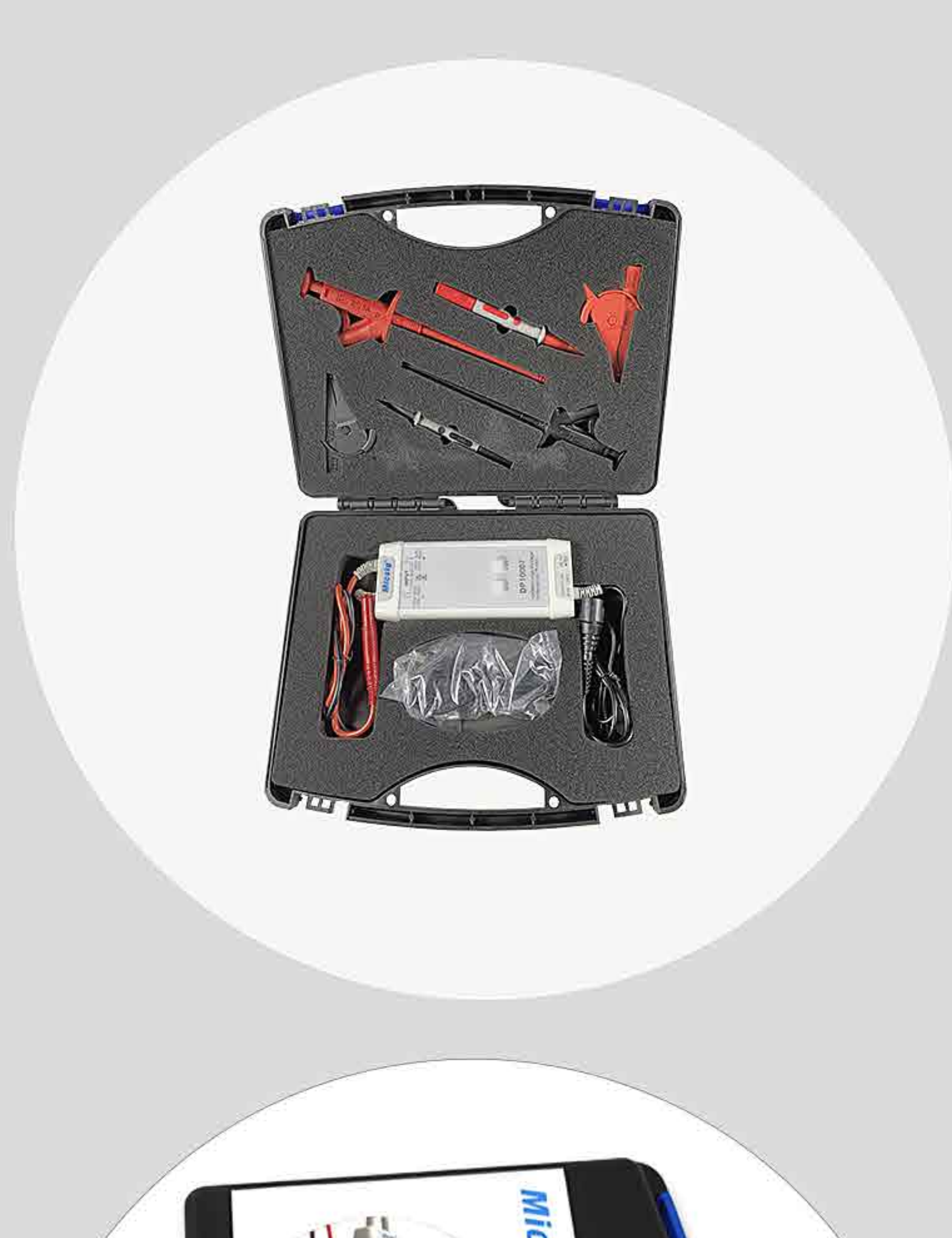
Model	DP10007
Bandwidth	100MHz
Rise Time	3.5ns
Range Selection(Attenuation Rate)	10X 100X
Accuracy	±2%
Maximum Differential Test Voltage (DC+ACPK)	70V(10X) 700V(100X)
Maximum input common mode voltage (DC+ACPK)	70V(10X) 700V(100X)
Maximum Input Voltage-to-Earth	600 V CAT I 1000 V CAT II
CMRR	≤-80dB@50Hz    ≤-60dB@20KHz ≤-50dB@1MHz    ≤-40dB@10MHz
Input Impedance	8MΩ/1.25pF(differential) 4MΩ/2.5pF(single-ended to ground)
Output Voltage	≤7V
Overload Alarm	Button light flashes
Power Supply	DC 5V, USB Supply
Power	1.25W
Dimension	14.5cm*6cm*2.7cm
Input cable length	Approx 45cm
Output cable length	Approx 90cm
Operating Temperature	0°C~40°C
Operating Humidity	10%~85%RH
Storage Temperature	-30~70°C
Storage Humidity	5%~90% RH

### Product Details



- ①Signal Input ②Power Output ③Power Input ④Signal Output
- ⑤Attenuation Indicators/Overrange Indicators(Flash)
- ⑥Alligator Clips (red black 1 pair) ⑦Hook Clips(red black 1 pair)
- ⑧Pincer Clips (red black 1 pair) ⑨USB Cable

### Product Packaging



Micsig high voltage differential probes DP series are designed for the measurement of high voltage differential signal, to meet the demand for floating measurement. It has 100MHz and has two kinds of different attenuation ranges: 10X, 100X indicate the maximum test voltage is 700V; 10X presents maximum test voltage is 70V.

### Operation instruction

**1 Power Supply:**  
USB DC 5V Output, more portable while oscilloscope have USB interface.

**2 Ground the Product:**  
To avoid electric shock, the grounding conductor must be connected to earth ground. Before making connections to the input or output terminals of the product, ensure that the product is properly grounded.

**3 Probe Connection:**  
Connect probe power input port to USB cable power output port, then connect the probe BNC port to oscilloscope or other instruments BNC port, set proper attenuation rate, and connect the probe with the measuring object.

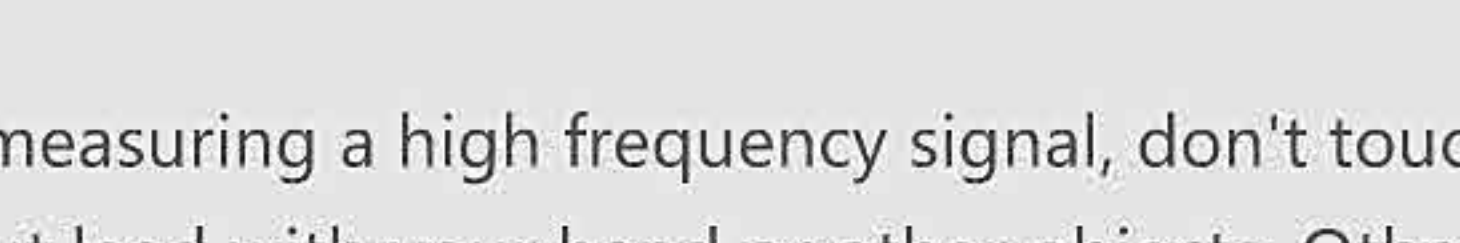
**4 Measurement:**  
You should estimate the tested voltage amplitude before testing, do not use if exceeds the voltage range.

**5 Probe disconnection:**  
First disconnect the inputs from the tested points, and then unplug the probe output and power input.

**How to use the DP10007**  
Only qualified personnel should perform service procedures.  
Do not touch exposed connections and components when power is present.  
While probe is overrange, please cut off the power and input immediately.  
Do Not Operate in an Explosive Atmosphere.  
Do Not Operate in Wet/Damp Conditions.  
Keep Product Surfaces Clean and Dry.

### Best Practices

1) Twisting the input leads together can help reduce noise and improve the probe's high frequency response when measuring signals. Please view the diagram below for an example:



2) Extending the input leads may introduce more noise during measurement. If extra extension lead is necessary, please ensure the extension leads are of equal length and the input signal frequency is under 10MHz. Otherwise, measurement errors may occur.

3) While measuring a high frequency signal, don't touch the end of the input lead with your hand or other objects. Otherwise, it may affect the accuracy of the measurement.

4) Ensure that you use an oscilloscope with an input impedance of at least 1MΩ and bandwidth of at least 100MHz.

5) Turn on the oscilloscope or externally powered instrument and let the probe and equipment warm up for 20 minutes.