OC5010 Current Probe
User Manual

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1. Presentation

The OC5010 clamp is a current probe for oscilloscope which uses a Hall effect cell for the measurement of DC or AC current without modification of the installation (without switching off the circuit)

It can measure currents from 50 mA to 100 A peak.

It has 2 ranges and 2 lights indication:
-"ON", correct power supply to the clamp.
-"OL", overload of the range in use (saturation or peak).

In addition, a thumbwheel can be used to reset zero for adaptation to the measurement environment.

This clamp adapts to any measurement instruments which have a BNC input and an impedance of 1MΩ, < 100pF.

2. Specification

Range	100mV/A	10mV/A
Current range	50mA-10Apeak	10A-100Apeak
Error（Accuracy）	2%±2mV	2%±2mV
Bandwidth（-3dB）	DC~100kHz	
Phase shift	DC~65Hz：<1.5°	DC~65Hz：<1°
Load impedan	≥1MΩ和≤100pF	
Insert impedance	0．01Ω	
Noise	3mV	480μV
Slew Rat	0.3V/μS	20mV/μs
Rise/fall time	3μs	＜4μs
Measurement Conditions	23 ℃ ± 5 ℃ ,20~75%RH, Sinusoidal frequency :48~65Hz, External magnetic field <40A/m， no load flow, the center of the test sample, load impedance:1MΩ	
Battery	9V Alkaline battery (meet up with: NEDA 1604A,IEC 6LR61)	
Low battery indicato	>6.5V,LED is green	
Overload indicator	Red LED means the measure current is too big and it need to change the measuring range	
Max. insert	10.3mm Diameter	
Dimension	231×36×67mm	
Weight	330g （include battery）	
Output	2 meters coaxial cable, terminal with insulation BNC connector jack	

3. Operating environ ment

1). Operating.Temp：0～+50℃
2). Storage.Temp：-3～+80℃
3). Operation relative humidity：
+10℃～+30℃：85±5% relative humidity（non-condensing）：
+40℃～+50℃：45±5% relative humidity（non-condensing）
4). Operating height：0~2000m

4. Operation

1). To make a current measurement,switch on the clamp by selectiong the 100mV/A range.Check that the battery indicator(green)is lit and that the <<OL>>indicator is not lit
2). Connect the clamp to the oscilloscope
With the clamp closed and without clamping a conductor,select the highese sensitivity(for example 1mV/cm)on the oscilloscope and 100mV/A on the clamp ,then set zero on the clamp with the thumbwheel in relation to a reference chosen on the oscilloscope.Zero on the oscilloscope makes it possible to adjust this setting.
3). Select the measurement sensitivities of the clamp and the oscilloscope
4). Choose the connection method which is the best adapted to measurement on the oscilloscope
5). Note the direction of the primary current by means of the arrow marked on and under the case .
6).Insert the conductor carrying the current to be measured in the clamp and take the measurement.
7). If necessary, re-check the origin of the graph,with the jaws not clamped around the conductor,and make the measurement again

5. Maintenance

For maintenance,please kindly contact the reseller or manufacturer..The manufacturer will not be held responsible for any accident occurring following repair done other than by its After Sales Service or approved repairs. Jaw faces:It is necessary to always keep the jaw faces clean. Clean them and lightly oil them to avoid rust.Do not leave the clamp in very damp places, or directy exposed to water. Handles and case:Clean with a cloth or a sponge soaked with soapy water,rinse in the same way without ever getting water on the clamp.Dry with a cloth or in an air flow. To maintain the performance of the clamp,it is advisable to carry out a check or recalibration every year