

UNI-T UT-P41 AC DC Current Probe Instruction Manual

Home » UNI-T » UNI-T UT-P41 AC DC Current Probe Instruction Manual



Contents

- 1 UNI-T UT-P41 AC DC Current
- **2 Product Usage Instructions**
- **3 PRESENTATION**
- **4 SPECIFICATION**
- **5 Operating environment**
- **6** Operation
- **7 MAINTENANCE**
- 8 Documents / Resources



UNI-T UT-P41 AC DC Current Probe



Product Information

UT-P41 AC/DC Current Probe

The UT-P41 AC/DC Current Probe is a measuring device for both AC and DC current. It has a measuring range of 50mA to 100A and is equipped with ON/OFF and Overload (OL) indicators. The probe comes with a BNC connector and has a 1M ohm impedance and 100pF capacitance.

The UT-P41 has two sensitivity modes: 100mV/A for measuring current in the range of 50mA to 10A, and 10mV/A for measuring current in the range of 10A to 100A. It has a -3dB bandwidth of DC~65Hz.

Product Usage Instructions

- 1. Connect the UT-P41 probe to the BNC connector of your measuring device.
- 2. Turn on your measuring device and select the appropriate sensitivity mode based on the range of current you wish to measure.
- 3. Clip the probe around the wire carrying the current you wish to measure. Ensure that the wire is centered inside the probe jaws for accurate measurements.
- 4. Read the measurement displayed on your measuring device. If the ON indicator is lit, it means that the probe is connected and working properly. If the OL indicator is lit, it means that the measured current exceeds the probe's measuring range.
- 5. After use, disconnect the probe from your measuring device and store it in a safe place.
- 6. Do not expose the UT-P41 probe to extreme temperatures or moisture. This may damage the probe and affect its accuracy.

PRESENTATION

The UT-P41 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 0.05A 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 allow measurement instruments which have a BNC input and an impedance of $1M\Omega$, 100pF.

SPECIFICATION

Model	UT-P41
Bandwidth	100KHz
Accuracy	3%±5mV
Current range	0.05A-10A,10A-100A
Ratio	10mV/A,100mV/A
Working voltage	600V
Low power	When 6.5V,green LED
Over-load	Red LED,use another range or model
Working Temp.	0°C to + 50°C /(+32°F to + 122°F)
Storage Temp.	-20°C to + 80°C/ (-4°F to 176°F)
Humidity	0°Cto40°C, 95%/ 40°C to 50°C, 45%
Clamp Dia.	11mm
Cable length	2m
Demision	231x67x36mm
Weight	330g(including battery)
Power supply	9V battery

Operating environment

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

Operation

1. To make a current measurement, switch on the clamp by selecting the 100mV/A range. Check that the battery indicator (green) is lit and that the <>indicator is not lit

- 2. Connect the clamp to the oscilloscope With the clamp closed and without clamping a conductor, select the highest 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.

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 directly 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.

Documents / Resources



<u>UNI-T UT-P41 AC DC Current Probe</u> [pdf] Instruction Manual UT-P41, UT-P30, UT-P41 AC DC Current Probe, UT-P41 Current Probe, AC DC Current Probe, AC Current Probe, DC Current Probe, Current Probe, Probe

Manuals+.