

## AC/DC Current Probes – CP1 Series

### Accurate, Rugged, Versatile and Reliable

- Two Models Multimeter (CP1000) and Oscilloscope (CP1005 / CP2005).
- Measurement of AC / DC and Complex Current Waveforms.
- 1000A Range (CP1000) 100A / 1000A Ranges (CP1005).
- 200A / 2000A Ranges (CP2005).
- Excellent Accuracy with High Resolution.
- Wide Bandwidth with Low Phase Shift.
- DC Auto Zero and Auto Power Off.
- Compact Lightweight Design.
- Output Voltages 1mV/A and 10mV/A (CP1005 / CP 2005).



### High Accuracy with Superior External Field Rejection

Advanced patented magnetic circuit design results in probes accuracy to be little affected by external magnetic fields or off-centre conductor positioning.

### Safety and EMC Conformance

Safety features including a tactile barrier and special jaw design provide the user with confidence when making measurements in hazardous voltage areas. Conformance to European EMC standards ensures high reliability through reduced susceptibility to electromagnetic interference.

### Typical Applications

- Light industrial and residential electrical installation testing.
- Battery charging systems.
- Analysis of switching waveforms in inverters, switch mode power supplies and industrial controls.
- Automotive applications e.g. Cranking current measurement on car battery lead.

## SPECIFICATIONS

NON-INVASIVE AC / DC CURRENT MEASUREMENT			
MODEL	CP 1000	CP 1005	CP 2005
Current Range	1000A DC or $AC_{RMS}$	100 / 1000A DC or $AC_{RMS}$	200 / 2000A DC or $AC_{PK}$
Output Sensitivity	1mV/A	10 / 1mV/A	10 / 1mV/A
Frequency Range	DC to 10kHz (-3dB)	DC to 20kHz (-3dB)	
Resolution	$\pm 500mA$	$\pm 100mA / \pm 500mA$	$\pm 100mA / \pm 500mA$
Basic Accuracy	$\pm 1\%$ of reading $\pm 0.5A$	$\pm 1\%$ of rdg $\pm 0.1A / \pm 0.5A$	$\pm 1\%$ of rdg $\pm 0.1A / \pm 0.5A$ $\pm 5\%$ of rdg $\pm 0.5A$ (1.5 – 2kA)
Conductor Position Sensitivity	$< \pm 1\%$ relative to centre reading		
Phase Shift (up to 1kHz)	N/A	$< 2$ degrees	
Load Impedance	$> 100$ kOhms		
Output Connection	Safety 4mm plugs	Safety BNC connector or Safety 4mm plugs	

### Environmental data

Operating Temperature: 0°C to 50°C (32°F to 122°F)  
 Temp. Coefficient:  $\pm 0.15\%$  of reading per °C  
 Storage Temperature: -20°C to 85°C (-4°F to 185°F)  
 (Without Battery)  
 All Accuracies Stated at: 23°C  $\pm$  1°C (73.4°F  $\pm$  1.8°F)

### Safety

EN 61010-1, EN 61010-2-032  
 300V Measurement Category III  
 Pollution Degree 2.

300V AC RMS or DC between uninsulated conductor and ground.

EMC Standard: EN 61326-2-2

### Mechanical Data

Dimensions: (mm) 194(H) x 74(W) x 25(D)  
 Weight: 320g  
 Jaw Capacity:  $\varnothing 32$ mm  
 (Other jaw sizes available on request)

### Part / Model Number

P-12.600.1	CP 1000
P-12.600.2	CP 1005
P-12.690.1	CP 2005
P-12.601.3	CP 1005_4mm
P-12.690.2	CP 2005_4mm

### Power Supply

Battery Type: 9v Alkaline: MN1604, PP3  
 IEC 6LR61 or equivalent

Battery Life: 50 Hours (Typical)

**GMC-I PROSYS Ltd** offers a wide range of non-invasive Probes, Clamp Meters and Transducers for the measurement and analysis of Current and Voltage.