

AC/DC Current Probes - CP3 Series

Accurate, Rugged, Versatile and Reliable

- Two Models Multimeter (CP30) and Oscilloscope (CP35 / CP305).
- AC / DC Low Current Measurement down to mA.
- Excellent Accuracy with 1mA Resolution (CP30 / CP35).
- DC Auto Zero and Auto Power Off.
- Compact Lightweight Design.
- Broad Bandwidth and Low Phase Shift for Power and Harmonics Measurement.
- Superior Noise Rejection for Power Electronics Applications.



High Accuracy with 1mA Resolution

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.
- Leakage current measurements.
- Process control for 4 – 20mA current loop verification.
- Battery charging systems.
- Analysis of switching waveforms in inverters, switch mode power supplies and industrial controls.
- Automotive applications e.g. Leakage current measurement on car battery lead, detection of ECU sleep mode and current profiling, all requiring high accuracy and superior resolution.

SPECIFICATIONS

NON-INVASIVE AC / DC CURRENT MEASUREMENT			
MODEL	CP 30	CP 35	CP 305
Current Range (s)	30A DC or AC <i>Peak</i>	30A DC or AC <i>Peak</i>	30 / 300A <i>RMS</i>
Output Sensitivity	100mV/A	100mV/A	10 / 1mV/A
Frequency Range	DC to 20kHz (-3dB)	DC to 100kHz (-0.5dB)	DC to 20kHz (-3dB)
Resolution	$\pm 1mA$	$\pm 1mA$	$\pm 50 / \pm 100mA$
Basic Accuracy	$\pm 1\%$ of reading $\pm 2mA$		$\pm 1\%$ of reading $\pm 50 / \pm 100mA$
Conductor Position Sensitivity	$< \pm 1\%$ relative to centre reading		
Phase Shift (up to 1kHz)	< 2 degrees		
Load Impedance	> 100 kOhms		
Output Connection	Safety 4mm plugs	Safety BNC connector	

Environmental data

Operating Temperature: 0°C to 50°C (32°F to 122°F)

Temp. Coefficient: $\pm 0.01\%$ of reading per °C
 $\pm 0.1\%$ of reading per °C
 (CP305)

Storage Temperature: -20°C to 85°C (-4°F to 185°F)

All Accuracies Stated at 23°C $\pm 1^\circ\text{C}$ (73.4°F $\pm 1.8^\circ\text{F}$)

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: $\varnothing 25\text{mm}$

Part / Model Number

P-12.200.1	CP30
P-12.200.2	CP35
P-12.460.0	CP305
P-12.460.5	CP305_4mm

Power Supply

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

Battery Life: 30 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.