

SETTING NEW STANDARDS IN AC/DC CURRENT MEASUREMENT

High Accuracy

Wide Bandwidth

Non-Intrusive

Compact Design

CP 30 30 A AC/DC high resolution Multimeter probe CP 35 30 A AC/DC high resolution Oscilloscope probe CP 41 40 A AC/DC high resolution True RMS clamp meter







A range of high performance AC/DC current probes and clamp meters are supplied by GMC-I PROSyS. The CP 30 and CP 35 are designed for use with multimeters, oscilloscopes and other recording instruments. The CP 41 is a True RMS current clamp meter. Compact clip on design conforms to latest safety and EMC standards and allows non-intrusive measurement of currents from mA to 30 Amps with high resolution. Using advanced Hall-Effect technology and a new patented magnetic circuit design to provide a broad frequency response, the probes will measure AC, DC and complex waveforms with high accuracy and resolution. All probes give an analogue voltage output directly proportional to the measured current, which is compatible with a wide range of measuring instruments. The probes features include:

- DC Auto Zero and Auto Power off
- Display hold for convenience in use (CP 41 only)
- Wide bandwidth and low phase shift for power and harmonics measurement.
- Superior noise rejection and superior rejection of external stray magnetic fields including the earth's magnetic field.

Typical applications are:

- Analysis of switching waveforms in inverters, switch mode power supplies and industrial controls.
- Light industrial and residential electrical installation testing.
- 4-20 mA current loop testing in Process Control applications.
- Automotive applications eg. Leakage current measurement on car battery lead, detection of ECU (electronic control unit) sleep mode and current profiling all requiring high accuracy and superior resolution.



CP 35 Oscilloscope probes have a wide bandwidth of DC to 100kHz and a resolution of 1mA are used for the analysis of switching waveforms in inverters, switch mode power supplies etc..

CP 41 TRMS Clamp meters with high accuracy and 1mA resolution are used in Automotive applications to measure sleep mode currents and diagnose faults.



NON-INVASIVE AC/DC CURRENT MEASUREMENT				
MODEL	CP 30	CP 35	CP 41	
Current Range	30 A	30 A	4/40 A	
Output Sensitivity	100 mV/A	100 mV/A	N/A	
Frequency Range	DC to 20 kHz (-1 dB)	DC to100 kHz (-0.5 dB)	DC and 15 Hz to 400 Hz (-3 dB)	
Resolution	<u>+</u> 1 mA	<u>+</u> 1 mA	<u>+</u> 1 mA / <u>+</u> 10 mA	
Overall Accuracy	± 1 mA of reading ± 2 mA		± 1 mA of reading ± 5 digits	
Conductor Position Sensitivity	< ± 1% relative to centre reading			
Phase Shift (up to 1 kHz)	< 2 degrees		N/A	
Load Impedance	> 100 kOhms		N/A	
Maximum Conductor Size	25mm diameter			
Battery Life	30 Hours typical		15 Hours typical	
Output Cable & Connectors	Safety 4 mm Plugs	Safety BNC Connector	N/A	
Safety	300V, Category III, Pollution Degree 2			
Display	N/A		400 count	



SETTING NEW STANDARDS IN AC CURRENT MEASUREMENT

Accurate

Flexible

Lightweight

ACP 3000 3000A AC Multimeter Probe ACP 3005 3000A AC Oscilloscope Probe



A range of high performance AC only flexible current probes, utilising Rogowski technology, are supplied by GMC-I PROSyS for use with multimeters, oscilloscopes and other recording instruments. The compact and lightweight design conforms to latest safety and EMC standards and allows non-intrusive measurement of currents from 100 mA to 3000 A. Probes give an analogue voltge output firectly proportional to the measured current which is compatible with a wide range of measuring instruments.

Probe features include:

- Degree of protection—IP65 (Probe), IP40 (Electronics)
- Wide dynamic range 100 mA to 3000 A

Typical applications are:

- Electrical maintenance, repair and machine installation and start up applications
- · Low and medium voltage distribution installations
- · Analysis of current distribution in mains networks
- Analysis of harmonics, power measurements, measurement of peak loads in mains and UPS.
- High current testing of switchgear and fuses
- Measurement of starting transients of electric motors



The flexible probe head of ACP 3000 allows quick and easy installation around conductors that may be inaccessible by conventional CTs and clamp meters.





NON-INVASIVE AC CURRENT MEASUREMENT				
MODEL ACP 3000		ACP 3005		
Current Ranges	30 / 3000 A			
Output Sensitivity	100 mV / 10 mV / 1 mV / A			
Linearity	± 0.2% of reading			
Basic Accuracy	<u>+</u> 1% of reading, <u>+</u> 0.1 A (30 A range), <u>+</u> 1% of reading, <u>+</u> 1 A (300 A/3000 A range)			
Conductor Position Sensitivity	< <u>±</u> 2% of reading			
Frequency Range (-1 dB)	10 Hz to 20 kHz			
Phase Shift (45-65 Hz)	< 1 degree			
External Power Option	N/A	3 V / 100mA		
Battery Life	2000 Hours			
Load Impedance	> 100 kOhms			
Probe Length	610 mm			
Safety	300V, Category III, Pollution Degree 2			
Dimensions (Electronic)	110 x 65 x 23 mm			
Output connection	Safety 4 mm plugs	Safety male BNC connector		