

FlexProbe® Flexible Current Probe Models 24-3001 & 24-3002



Model 24-3001

The FlexProbe® Models 24-3001 and 24-3002 are low cost AC current measurement probes designed to plug into digital multimeters, oscilloscopes, and power recorders. The Model 24-3001 is composed of a

flexible sensor and an electronic module with a 14" double insulated cable, while the Model 24-3002 has a flexible sensor and an electronic module with 4mm safety banana plugs with 3/4" spacing. The flexible sensors

are designed to fit around large or small conductors and are capable of getting into tight or difficult places. They are ideal for measuring AC current in a group of conductors.

Features

- 24" flexible sensor fits around conductors up to 7.6" in diameter
- Dual measurement ranges of 300A and 3000AAC
- Read amperage directly on DMM display
- mV output directly proportional to the AC current measured
- Output is 10mV/A on 300A range and 1mV/A on 3000A range
- Accuracy of 1% of Reading \pm 500mA
- 4% influence of conductor position in jaw
- Up to 300 hour battery life
- Dual banana plug termination for direct input into DMMs (Model 24-3001)
- Electronic module with 4mm safety banana plugs with 3/4" spacing (Model 24-3002)
- EN 61010, 1000V Cat. III, Pollution Degree: 2
- Flashing LED low battery indicator

Applications

- Motor testing and troubleshooting
- Load monitoring
- HVAC troubleshooting
- Power analysis
- Transformer testing
- Substation testing



FlexProbe® conveniently plugs into the standard DMM voltage input for direct read-out of the measured current.

Specifications

MODELS	24-3001		24-3002	
ELECTRICAL				
Current Range	300/3000A _{AC}			
Output Signal	mV output (4000mV peak max)			
Three Position Slide Switch	5A to 300Arms 50A to 3000Arms			
10mV/A				
1mV/A				
ON/OFF				
AC Current Accuracy	1% of Reading ± 500mA			
Crest Factor	4.5			
Phase Shift*	<0.7° at 50 or 60Hz			
Frequency Range	40 to 5kHz			
Working Voltage	1000V _{rms} max (Cat. III)			
Common Mode Voltage	600V _{rms} max			
Power Source	9V Alkaline (NEDA 1604A, IEC 6LR61)			
Battery Life	150 hours typical (continuous use) 300 hours with Lithium battery			
MECHANICAL				
Dimensions	4.9 x 2.5 x 1.1" (124 x 64 x 28mm)			
Weight (with battery)	1.1 lb (0.5kg)			
Maximum Conductor Size	7.6" (193mm)			
Sensor Length	24" ± 1" (610mm ± 25.4mm)			
Cable Length	6.5 ft (2m)			
Output	Double insulated 14" (36cm) lead with safety banana plugs	4mm safety banana plugs (red and black)		
ENVIRONMENTAL				
Operating Temperature	14° to 131°F (-10° to +55°C)			
Storage Temperature	40° to 70°F (-40° to +158°C)			
Operating Relative Humidity	50° to 86°F (10° to 30°C) 85 to ±5% RH (non-condensing) 104° to 122°F (40° to 50°C) 45 to ±5% RH (non-condensing)			
SAFETY				
Rating	EN 61010, 1000V, Cat. III, Pollution Degree: 2			
CE Mark	Yes			

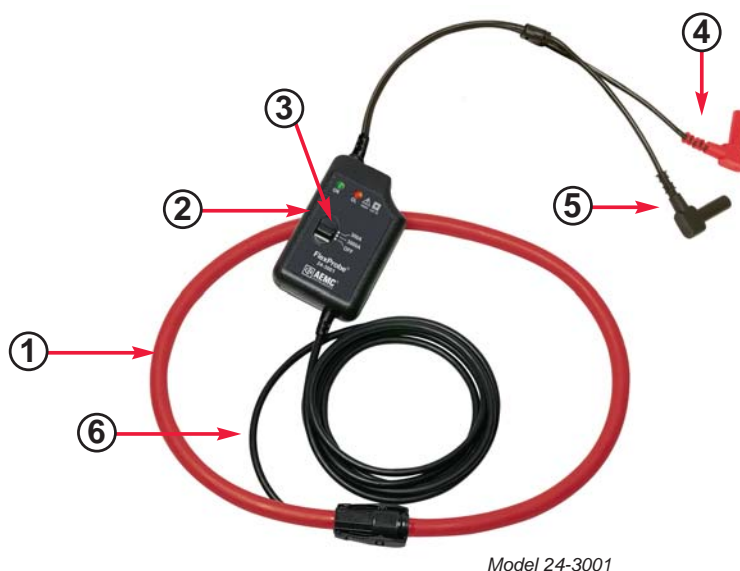
*Reference Conditions: 23°C \pm 3K, 20 to 70% RH, 50Hz, 1 minute warm-up, battery at 9V \pm 0.1V, external magnetic field <40A/m, no DC component, no external current carrying conductor, 10M Ω load, conductor center.

Construction



Model 24-3001

1. Flexible Sensor
2. Electronic Module
3. Range Selection Switch
4. Positive: Red Banana Plug (+)
5. Common: Black Banana Plug (-)
6. Lead



Model 24-3002

1. Flexible Sensor
2. Electronic Module
3. Range Selection Switch
4. Common: Black Banana Plug (-)
5. Positive: Red Banana Plug (+)
6. Lead



Banana (female) - BNC (male) Adaptor
Catalog #2118.46 (optional)

ORDERING INFORMATION

CATALOG NO.

FlexProbe® Model 24-3001 (300/3000AAC, 24", 10mV/A/1mV/A, with lead)	Cat. #2120.81
FlexProbe® Model 24-3002 (300/3000AAC, 24", 10mV/A/1mV/A)	Cat. #2120.82
Accessories	
Banana (Female) – BNC (Male) Adapter	Cat. #2118.46

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