

# LongLife AmpFlex® Flexible AC Current Probe Models LGLF 1000-24-1-1, LGLF 1000-24-2-1, LGLF 3000-36-1, LGLF 3000-36-2-1



Model LGLF 1000-24-1-1

The LongLife AmpFlex® is a flexible AC current probe composed of a flexible sensor and an electronic module. The flexible sensor permits measurements on conductors where standard clamp-on probes could not be used. In particular, it can be installed in tight spaces, around breaker panels, around cable bundles, around wide or large bus bars, or even wrapped around irregular shapes. The Shape Memory feature enables the user to “pre-shape” the sensor, somewhat,

before inserting it between or around conductors. This feature facilitates closing, enhances user safety, and alleviates the drooping effect typically associated with flexible sensors.

The LongLife AmpFlex® is lightweight. It does not use magnetic cores like standard transformers. The transformation principle is based on an air core. It presents virtually no load to the system under test, has a low phase shift and excellent frequency response, and cannot be damaged

by overloads. The sensor assembly is waterproof and insulated for 1000V Cat. III.

The LongLife AmpFlex® has a mV output proportional to the current measured for direct readings on DMMs, data loggers and oscilloscopes. TRMS measurements are taken when connected to a TRMS meter. The LongLife AmpFlex® is insensitive to DC currents and only the AC component of the measured signal is measured.

## Features

- Single or dual range to measure up to 3000A
- TRMS measurements when connected to a TRMS instrument
- No core saturation or damage if overloaded
- Waterproof sensor
- 9V Alkaline battery for typical use of 2000 hrs continuous operation
- Shape Memory for pre-shaping of sensor before use (no drooping)
- Insensitive to DC, measures only AC component on DC + AC
- Excellent linearity
- EN 61010, 1000V Cat. III (sensor); EN 61010, 600V Cat. III (module)

## Applications

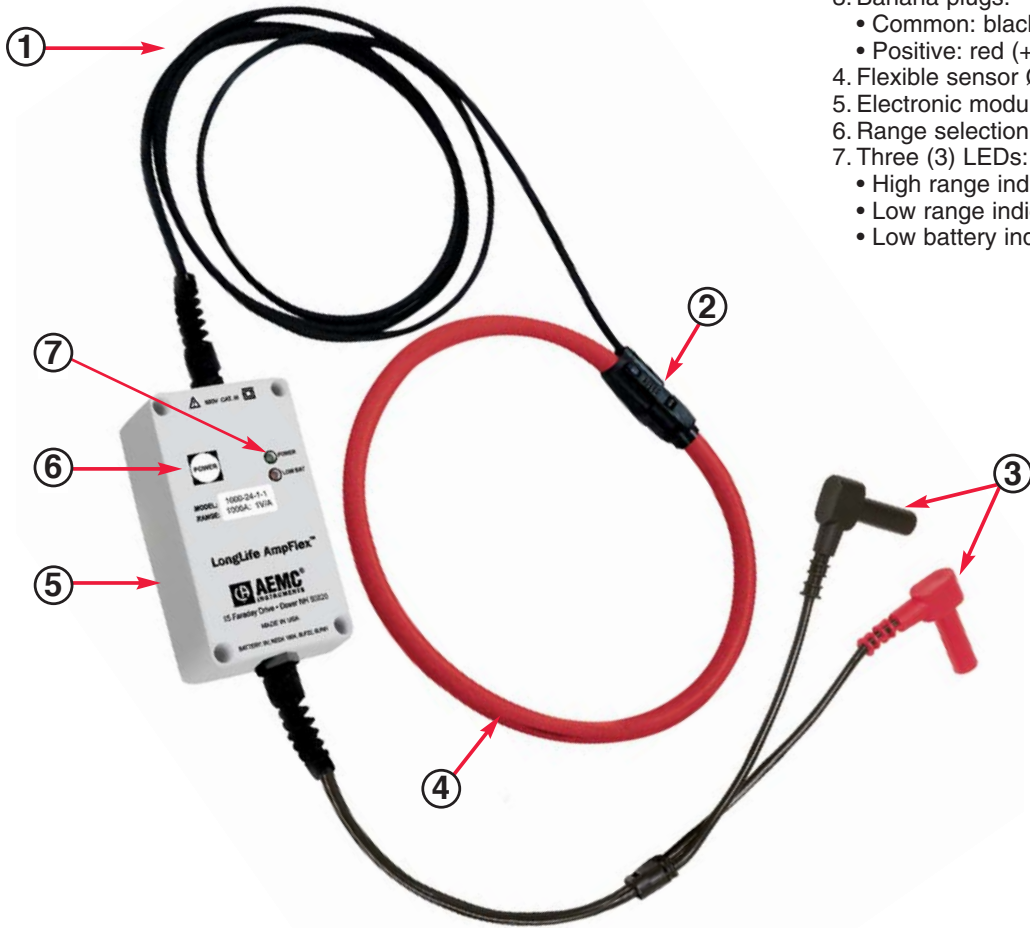
- Load analysis
- Data logging
- Power quality monitoring
- General purpose current monitoring

## Specifications

MODELS	LGLF 1000-24-1-1	LGLF 1000-24-2-1	LGLF 3000-36-1-1	LGLF 3000-36-2-1
<b>ELECTRICAL</b>				
Current Range	5 to 1000A	5 to 100A: 50 to 1000A	5 to 3000A	5 to 300A: 50 to 3000A
Output Signal	1mV/A	10mV/A & 1mV/A	0.333mV/A	3.33mV/A & 0.333mV/A
Accuracy*	1% of Reading + 200mA from 50 to 1000A 1% of Reading + 500mA from 5 to 50A	1% of Reading + 200mA	1% of Reading + 200mA from 50 to 3000A 1% of Reading + 500mA from 5 to 50A	1% of Reading + 200mA
Residual Current	500mArms	200mArms	500mArms	200mArms
Overload	500A max	500A max	500A max	500A max
Phase Shift	<1° @ 50 to 60Hz	<1° @ 50 to 60Hz	<1° @ 50 to 60Hz	<1° @ 50 to 60Hz
Frequency Range	40 to 5kHz	40 to 5kHz	40 to 5kHz	40 to 5kHz
<b>MECHANICAL</b>				
Dimensions	Sensor: 24" or 36" (609 or 914mm) Module: 1.56 x 2.5 x 4.5" (40 x 64 x 114mm)			
Weight	0.8 lb (13 oz)			
Maximum Conductor Size	24": Ø 7.64" (194mm); 36": Ø 11.46" (291mm)			
Cable Length	6.5 ft (2m) sensor to cast			
Output	14" (0.35m) double insulated cable with 4mm banana plug			
<b>ENVIRONMENTAL</b>				
Operating Temperature	14° to 131°F (-10° to 55°C)			
Storage Temperature	-4° to 158°F (-20° to 70°C)			
Operating Relative Humidity	50° to 86°F (10° to 30°C) (non-condensing) 104° to 122°F (40° to 50°C) (non-condensing)			
<b>SAFETY</b>				
Rating	EN 61010, 1000V, Cat. III, Pollution Degree: 2			

\*Reference Conditions 73.4°F (23°C) ±3°K, 20 to 70% RH, 50/60Hz, no external AC magnetic field, DC magnetic ≤40A/m (earth field), supply: 8V + 10%. 1MΩ Load.

# Construction



1. Lead, 6.5 ft (2m)
2. AmpFlex® connector/latch
3. Banana plugs:
  - Common: black (-)
  - Positive: red (+)
4. Flexible sensor Ø 0.5" (12.5mm)
5. Electronic module
6. Range selection push button
7. Three (3) LEDs:
  - High range indicator
  - Low range indicator
  - Low battery indicator

Model LGLF 1000-24-1-1

## ORDERING INFORMATION

## CATALOG NO.

LongLife AmpFlex® Model LGLF 1000-24-1-1 (1000A, 24", 0.1mV/A) .....	Cat. #2120.66
LongLife AmpFlex® Model LGLF 1000-24-2-1 (100/1000A, 24", 10mV/1mV/A) .....	Cat. #2120.67
LongLife AmpFlex® Model LGLF 3000-36-1-1 (3000A, 36", 0.3mV/A) .....	Cat. #2120.68
LongLife AmpFlex® Model LGLF 3000-36-2-1 (300/3000A, 36", 0.3mV/3.3mV/A) .....	Cat. #2120.69

## Contact Us

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