AMPFLEX® FLEXIBLE CURRENT PROBES

Flexible AC current probe composed of a flexible sensor and an electronic module

SCAN TO LEARN MORE

FEATURES

- Models ranging from (0.5 to 30,000) Arms
- Accuracy ± 1 % of Reading
- TRMS measurements when connected to a TRMS instrument
- No core saturation or damage if overloaded
- Over range LED for measurement circuitry
- Waterproof sensor
- 9 V Alkaline battery, typically provides 150 hours of continuous operation *(battery included)*
- Shape memory for custom pre-shaping of sensor before use *(no drooping)*
- Very high frequency response
- Low phase shift for power measurements of < 1.3 °, *(0.7 ° typical)*
- Insensitive to DC, measures only AC component on DC + AC signals
- Excellent linearity
- Lightweight

MODEL	MEASUREMENT RANGE	OUTPUT SIGNAL	SENSOR LENGTH	MAX CONDUCTOR SIZE	CAT. #
300-24-2-10	(30 / 300) A	(100 / 10) mV/A	24 in (610 mm)	8 in (203 mm)	2112.88
300-120-2-10	(30 / 300) A	(100 / 10) mV/A	120 in (3048 mm)	38 in (970 mm)	2113.39
1000-24-2-1	(100 / 1000) A	(10 / 1) mV/A	24 in (610 mm)	8 in (203 mm)	2112.98
1000-36-2-1	(100 / 1000) A	(10 / 1) mV/A	36 in (914 mm)	11 in (279 mm)	2113.00
3000-24-1-1	3000 A	1 mV/A	24 in (610 mm)	8 in (203 mm)	2112.46
3000-36-1-1	3000 A	1 mV/A	36 in (914 mm)	11 in (279 mm)	2112.48
3000-24-2-1	(300 / 3000) A	(10 / 1) mV/A	24 in (610 mm)	8 in (203 mm)	2113.05
3000-36-2-1	(300 / 3000) A	(10 / 1) mV/A	36 in (914 mm)	11 in (279 mm)	2112.00
3000-48-2-1	(300 / 3000) A	(10 / 1) mV/A	48 in (1219 mm)	15 in (381 mm)	2112.01
6000-36-2-0.1	(600 / 6000) A	(1 / 0.1) mV/A	36 in (914 mm)	11 in (279 mm)	2113.21
30000-24-2-0.1	(3000 / 30,000) A	(1 / 0.1) mV/A	24 in (610 mm)	8 in (203 mm)	2113.33

Consult factory for NIST Calibration prices. Consult factory for special offers and ranges/lengths not shown
Note: Output is safety shrouded 4 mm male banana plug.

FLEXPROBE® FLEXIBLE CURRENT PROBE 24-3001

AC current measurement probe designed to plug into digital multimeters, oscilloscopes and power recorders

SCAN TO LEARN MORE

FEATURES

- 24-inch flexible sensor fits around conductors up to 7.6 inch in diameter
- Dual measurement ranges of 300 A and 3000 Aac.
- Read amperage directly on DMM display
- mV output directly proportional to the AC current measured
- Output is 10 mV/A on 300 A range and 1 mV/A on 3000 A range
- Accuracy of ± 1 % of Reading ± 500 mA
- 4 % influence of conductor position in jaw
- Dual banana plug termination for direct input into DMMs
- Flashing LED low battery indicator
- 9 V Alkaline battery, provides typical 150 hours of continuous operation *(battery included)*

ACCESSORIES

BANANA *(FEMALE)* BNC *(MALE)* (XM-BB)

CAT #2118.46

(optional for AmpFlex® & FlexProbe® Flexible Current Probes)

MODEL	24-3001
ELECTRICAL	
Current Range	(300 / 3000) Aac
Output Signal	mV output *(4000 mV peak max)*
Three Position Slide Switch	
10 mV/A	5 A to 300 Arms
1 mV/A	50 A to 3000 Arms
ON / OFF	
Power Supply	9 V Alkaline battery *(included)*
MECHANICAL	
Maximum Conductor Size	7.6 in (193 mm)
Sensor Length	24 in ± 1 in (610 ± 25) mm
Cable Length	6.5 ft (2 m)
Output Termination	Double insulated 14 in (355 mm) lead with 4 mm safety banana plugs

Consult factory for NIST Calibration prices.

CAT. #	DESCRIPTION
2120.81	FlexProbe® Model 24-3001 (Lead)

CURRENT MEASUREMENT PROBES

GENERAL PURPOSE PROBES SELECTION CHART

Series	Model	Ratio	Measurement Range		Output Signal		Phase Shift**	Maximum Conductor Size		Output Connection	CAT. #
			AC	DC	Current	Voltage		Ø Cable	Bus Bar		
	**MN01**	1000:1	(2 to 150) A	–	1 mA/A*	–	N / A	0.39 in (10 mm)	N / A	Leads	2129.17
	MN02	1000:1	50 mA to 100 A 50 mA to 90 A	–	1 mA/A*	–	N / A	0.39 in (10 mm)	N / A	Leads	2129.20
	MN05	–	5 mA to 10 A (1 to 100) A	–		1 mV/mA 1 mV/A	N / A	0.39 in (10 mm)	N / A	Leads	2129.19
	MN09	–	(1 to 150) A	–		100 mV_{DC} / A_{AC}	N / A	0.39 in (10 mm)	N / A	Leads	2129.21
	**MN134**	–	1 mA to 10 A	–		100 mV_{AC} / A_{AC}	< 10°	0.39 in (10 mm)	N / A	Leads	2129.22
	MN185	1000:1	50 mA to 120 A	–	1 mA/A	–	< 3.5 °	0.47 in (12 mm)	N / A	Jacks	100.185
	**MN255**	–	(0.1 to 24) A (0.1 to 240) A	–		100 mV/A 10 mV/A	< 2.5 °	0.78 in (20 mm)	N / A	Leads	2115.81
	MN261	–	(0.1 to 24) A (0.5 to 240) A	–		100 mV/A 10 mV/A	< 6 °	0.78 in (20 mm)	N / A	BNC	2115.82
	MN291	–	(0.5 to 240) A	–		100 mV_{DC} / A_{AC}	N / A	0.78 in (20 mm)	N / A	Leads	2115.84
	MN307	–	10 mA to 12 A	–		100 mV/A	< 2.5 °	0.78 in (20 mm)	N / A	Leads	2116.23
	MN312	1000:1	(0.1 to 200) A	–	1 mA/A*	–	< 2.5 °	0.78 in (20 mm)	N / A	Jacks	2116.24
	MN352	–	(0.1 to 150) A	–		10 mV/A	< 2.5 °	0.78 in (20 mm)	N / A	Jacks	2116.26
	MN353	–	(0.1 to 150) A	–		10 mV/A	< 2.5 °	0.78 in (20 mm)	N / A	Leads	2116.27
	MN373	–	(0.01 to 2.4) A (0.1 to 200) A	–		1000 mV/A 10 mV/A	< 3 °	0.78 in (20 mm)	N / A	Leads	2116.28
	MN375	–	(0.1 to 10) A	–		100 mV/A	< 1.5 °	0.78 in (20 mm)	N / A	Leads	2115.41
	MN379	–	5 mA to 6 A (0.1 to 120) A	–		200 mV/A 10 mV/A	< 4 °	0.78 in (20 mm)	N / A	Leads	2153.01
	MN379T	–	5 mA to 6 A (0.1 to 120) A	–		200 mV/A 10 mV/A	< 4 °	0.78 in (20 mm)	N / A	Lead w / BNC	2153.02
	**SL206**	–	10 mA to 1.5 A 50 mA to 60 A	10 mA to 2 A 50 mA to 80 A	–	1 $mV/mA_{AC/DC}$ 10 $mV/A_{AC/DC}$	< 1 °	0.46 in (12 mm)	N / A	Leads	1201.45
	**MD301**	1000:1	(2 to 500) A	–		1 mV_{DC} / A_{AC}	N / A	1.18 in (30 mm) (2 x 500) kcmil	(2.48 x 0.20) in (63 x 5) mm	Leads	1201.07
	MD305	1000:1	(1 to 600) A	–	1 mA/A	–	< 1 °	1.18 in (30 mm) (2 x 500) kcmil	(2.48 x 0.20) in (63 x 5) mm	Leads	1201.36

*Output protection for open secondary.
**Phase shift indicated at maximum rating.

Note: Model MN185 are not CE compliant. MN200 & MN300 series are UL approved except MN379.
Consult factory for NIST Calibration price.

Technical Assistance (800) 343-1391

CURRENT MEASUREMENT PROBES

GENERAL PURPOSE PROBES SELECTION CHART

SERIES	MODEL	RATIO	MEASUREMENT RANGE		OUTPUT SIGNAL		PHASE SHIFT**	MAXIMUM CONDUCTOR SIZE		OUTPUT CONNECTION	CAT. #
			AC	DC	CURRENT	VOLTAGE		Ø CABLE	BUS BAR		
	**MR415**	–	(0.5 to 400) A	(0.5 to 600) A	–	1 mV/A	≤ 1.5 °	1.18 in (30 mm)	2 bus bar (1.24 x 0.39) in (31 x 10) mm	5 ft (1.5 m) Lead	1200.80
	MR416	–	(0.5 to 40) A (0.5 to 400) A	(0.5 to 60) A (0.5 to 600) A	–	10 mV/A 1 mV/A	≤ 2.2 ° ≤ 1.5 °	1.53 in (39 mm)	2 bus bar (1.95 x 0.19) in (50 x 5) mm	5 ft (1.5 m) Lead	1200.82
	MR526	–	(0.5 to 100) A (0.5 to 1000) A	(0.5 to 150) A (0.5 to 1400) A	–	10 mV/A 1 mV/A	≤ 2 ° ≤ 1.5 °	1.53 in (39 mm)	2 bus bar (1.95 x 0.19) in (50 x 5) mm	5 ft (1.5 m) Lead	1200.83
	**SR601**	1000:1	(0.1 to 1200) A	–	1 mA/A*	–	< 0.5 °	2.05 in (52 mm)	(1.95 x 0.19) in (50 x 5) mm	Jacks	2113.43
	SR604	1000:1	(0.1 to 1200) A	–	1 mA/A*	–	< 0.5 °	2.05 in (52 mm)	(1.95 x 0.19) in (50 x 5) mm	Leads	2113.44
	SR651	–	(0.1 to 1200) A	–	–	1 mV/A	< 0.5 °	2.05 in (52 mm)	(1.95 x 0.19) in (50 x 5) mm	Jacks	2113.45
	SR701	1000:1	1 mA to 1000 A	–	1 mA/A*	–	< 0.7 °	2.05 in (52 mm)	(1.95 x 0.19) in (50 x 5) mm	Jacks	2116.29
	SR704	1000:1	1 mA to 1000 A	–	1 mA/A*	–	< 0.7 °	2.05 in (52 mm)	(1.95 x 0.19) in (50 x 5) mm	Leads	2116.30
	SR752	–	(0.1 to 1000) A	–	–	1 mV/A	< 0.7 °	2.05 in (52 mm)	(1.95 x 0.19) in (50 x 5) mm	Leads	2116.32
	SR759	–	1 mA to 1 A 10 mA to 10 A (0.1 to 100) A (1 to 1000) A	–	–	1000 mV/A 100 mV/A 10 mV/A 1 mV/A	< 1 °	2.05 in (52 mm)	(1.95 x 0.19) in (50 x 5) mm	Leads	2116.33
	**K100**	–	0.1 mA to 3 A	0.05 mA to ± 4.5 A	–	1 mV/mA	N / A	0.18 in (4.5 mm)	N / A	Plugs	1200.67
	K110	–	(0.1 to 300) mA	(0.05 to ± 450) mA	–	10 mV/mA	N / A	0.18 in (4.5 mm)	N / A	Plugs	2111.73
	**LM102**	1000:1	50 mA to 200 A	–	1 mA/A*	–	< 3 °	0.63 in (16 mm)	N / A	Leads	2153.04
	LM103	–	(0.1 to 200) A	–	–	1 mV/A	< 3 °	0.63 in (16 mm)	N / A	Leads	2153.05

*Output Protection for open secondary.
**Phase shift indicated at maximum rating.

Note: All SR probes listed on this chart are UL approved, however not all SR series probes are UL approved; please consult factory.
Consult factory for NIST Calibration price.

OUTPUT TERMINATIONS

Lead with BNC
Insulated 6.5 ft (2 m) coaxial cable with insulated BNC connector rated 600 Vrms

Jacks
Two standard safety banana jacks (4 mm)

Leads
Double/reinforced 5 ft (1.5 m) leads with 4 mm safety banana plug

Shrouded Banana Plugs
Two 4 mm safety banana plugs; standard ¾ in (19 mm) spacing

CURRENT MEASUREMENT PROBES

AMPFLEX® AND MINIFLEX® PROBES - SELECTION CHARTS

SERIES	MODEL	RATIO	MEASUREMENT RANGE	OUTPUT SIGNAL	MAXIMUM CONDUCTOR SIZE	CAT. #
	MF 300-10-2-10-HF	–	(30 / 300) A	100 mV/A, 10 mV/A	2.95 in (75 mm)	2126.84
	MF 3000-14-1-1-HF	–	3000 A	1 mV/A	3.93 in (100 mm)	2126.86
	MA114	–	(3 / 30 / 300 / 3000) A	1 mV/mA, 100 mV/A 10 mV/A, 1 mV/A	4 in (101 mm)	2153.41
	300-24-2-10	–	(30 / 300) A	100 mV/A, 10 mV/A	7.48 in (190 mm)	2112.88
	1000-24-1-1	–	1000 A	1 mV/A	7.48 in (190 mm)	2112.39
	1000-24-2-1	–	(100 / 1000) A	10 mV/A, 1 mV/A	7.48 in (190 mm)	2112.98
	1000-36-2-1	–	(100 / 1000) A	10 mV/A, 1 mV/A	11 in (280 mm)	2113.00
	3000-24-1-1	–	3000 A	1 mV/A	7.48 in (190 mm)	2112.46
	3000-36-1-1	–	3000 A	1 mV/A	11 in (280 mm)	2112.48
	3000-24-2-1	–	(300 / 3000) A	10 mV/A, 1 mV/A	7.48 in (190 mm)	2113.05
	3000-48-2-1	–	(300 / 3000) A	10 mV/A, 1 mV/A	15 in (381 mm)	2112.01
	6000-36-2-0.1	–	(600 / 6000) A	1 mV/A, 0.1 mV/A	11 in (280 mm)	2113.21
	30000-24-2-0.1	–	(3000 / 30,000) A	1 mV/A, 0.1 mV/A	7.48 in (190 mm)	2113.33
	24-3001	–	300 A / 3000 AAC	10 mV/A, 1 mV/A	7.48 in (190 mm)	2120.81

Consult factory for NIST Calibration price.

OSCILLOSCOPE & BNC TERMINATED PROBES

MODEL	MEASUREMENT RANGE		OUTPUT SIGNAL	PHASE SHIFT*	MAXIMUM CONDUCTOR SIZE		OUTPUT CONNECTION
	AC	DC	VOLTAGE		Ø CABLE	BUS BAR	
SL261 	100 mA to 10 A (1 to 100) A		100 mV/A 10 mV/A	< 1.5 °	0.46 in (12 mm)	N / A	6.5 ft (2 m) Lead w / BNC
MN261 	(0.1 to 24) A (0.5 to 240) A	–	100 mV/A 10 mV/A	< 2.5 °	0.78 in (20 mm)	N / A	6.5 ft (2 m) Lead w / BNC
SR661 	(0.1 to 12) A (0.1 to 120) A (1 to 1200) A	–	100 mV/A 10 mV/A 1 mV/A	< 1 °	2.05 in (52 mm)	(1.96 x 0.19) in (50 x 5) mm	6.5 ft (2 m) Lead w / BNC
MN251T MN379T 	(0.5 to 240) A	–	1 mV/A	≤ 2.5 °	0.78 in (20 mm)	(0.78 x 0.19) in (20 x 5) mm	10 ft (3 m) Lead w / BNC
	(0.005 to 6) A (0.1 to 120) A	–	200 mV/A 10 mV/A	≤ 4 ° ≤ 2.2 °	0.78 in (20 mm)	(0.78 x 0.19) in (20 x 5) mm	10 ft (3 m) Lead w / BNC
MH60 	(0.5 to 100) A	(0.5 to 100) A	10 mV/A	< 1 °	1.02 in (26 mm)	N / A	6.6 ft (2 m) Lead w / BNC
MR417 	(0.5 to 40) A (0.5 to 400) A	(0.5 to 60) A (0.5 to 600) A	10 mV/A 1 mV/A	≤ 2.2 ° ≤ 1.5 °	1.18 in (30 mm)	2 bus bar (1.24 x 0.39) in (32 x 10) mm	6.6 ft (2 m) Lead w / BNC
MR527 	(0.5 to 100) A (0.5 to 1000) A	(0.5 to 150) A (0.5 to 1400) A	10 mV/A 1 mV/A	≤ 2.2 ° ≤ 1.5 °	1.53 in (39 mm)	2 bus bar (1.96 x 0.19) in (50 x 5) mm	6.6 ft (2 m) Lead w / BNC

*Phase shift indicated at maximum rating. Note: All probes are rated 600 V CAT III and CE compliant. Not all models are UL approved; please consult factory.
Consult factory for NIST Calibration price.