

# CURRENT MEASUREMENT PROBES

## Selection for General Purpose & Oscilloscope/BNC Terminated Probes

**Learn more on how  
to select a proper  
Clamp-On Current Probe  
for your specific needs**



### MiniFlex® Series

- Measures from 0.5 to 3000Arms
- Accuracy  $\pm 1\%$  of Reading  $\pm$  from 0.2 to 0.25A
- TRMS measurements when connected to a TRMS instrument
- No core saturation or damage if overloaded
- Low phase shift for power measurements
- Measures only AC
- High frequency models available for oscilloscopes
- Excellent linearity
- CE Mark



### DC/AC MicroProbes

- Measures extremely low level DC from 100 $\mu$ A
- Outputs signal proportional to total current (DC + AC)
- Low noise
- Ultra-compact size and non-contact clamp-on convenience
- Simple plug-in operation
- Designed for use with digital multimeters and oscilloscopes
- No range or mode (AC/DC) switching required
- CE Mark



### MN200 & MN300 Series AC Current Probes

- Small, compact size
- Measurement range of 5mA to 240AAC
- Jaw opening accommodates conductors up to 250kcmil
- Designed for DMMs, loggers, recorders and oscilloscopes
- 40Hz to 10kHz response
- Available with mA or mV output signals
- Available with jack outputs, integral leads with shrouded safety banana plugs or BNC terminated lead
- CE Mark, UL approved



### MR400 & MR500 Series AC/DC Current Probes

- Measurement range of 400AAC/600ADC (MR400 Series)
- Measurement range of 1000AAC/1500ADC (MR500 Series)
- Two distinct jaw shapes to be used for hooking or prying around the conductor
- Low phase shift for power measurements
- Designed for DMMs, recorders, oscilloscopes, power and harmonic meters
- CE Mark



### SR Series Current Probes

- Measurement range of 100mA to 1200AAC
- Large jaw opening accommodates up to two 500kcmil conductors
- Ergonomic design and easy operation
- Low phase shift for power measurements
- Available with mA or mV output signals
- Designed for DMMs, recorders, loggers, oscilloscopes, power and harmonic meters
- CE Mark, UL approved



### Flexible Current Probes

- Models ranging from 30 to 30,000Arms
- Accuracy  $\pm 1\%$  of reading
- TRMS measurements when connected to a TRMS instrument
- No core saturation or damage if overloaded
- Overrange LED for measurement circuitry
- CE Mark



### MD Series AC Current Probes

- 600A range with mA or mV output
- Unique hook-shaped jaws that enable the user to "pry" into or "hook" onto cables
- Maximum conductor size is 2 x 500kcmil
- Works as a traditional current transformer with ratio of 1000:1
- AC/DC outputs available
- CE Mark



### JM Series AC Current Probes

- Current range: up to 3000AAC (continuous cycle for the full temperature range)
- Output: 1mA/A voltage or V/A voltage
- Designed for use on DMMs, power and harmonic meters, recorders of instruments with AC current ranges
- CE Mark



### MN01 to MN05 Series AC Current Probes

- Small, compact and very tough AC probes
- "Clothes pin" shape makes them ideal for use in tight areas, such as breaker panels, controller panels or outlets
- Measurements from 1mA to 150AAC
- Excellent companions to all DMMs, permits very low AC current measurements
- CE Mark



### MN100 Series AC Current Probes

- Small, compact and very tough AC probes
- "Clothes pin" shape makes them ideal for use in tight areas, such as breaker panels, controller panels or outlets
- Measurements from 1mA to 150AAC
- Excellent companions to all DMMs, permits very low AC current measurements



### SL Series AC/DC Current Probes





- Low AC and DC measurements
- 50mA to 100A peak
- Unique design for probing in crowded wiring in industrial and automotive environments
- Hall effect sensor technology
- Use with DMMs, voltmeters and other voltage measuring instruments
- CE Mark



Note: Product image size not proportionate. Not all models are CE and UL approved; please consult factory.

### Oscilloscope & BNC Terminated Probes

**Oscilloscope current probes expand oscilloscope applications in industrial or power measurement environments, and are ideal for analysis and measurement of distorted current waveforms and harmonics**

MODEL	MEASUREMENT RANGE		OUTPUT SIGNAL	PHASE SHIFT*	MAXIMUM CONDUCTOR SIZE		OUTPUT CONNECTION
	AC	DC	VOLTAGE		Ø CABLE	BUS BAR	
<b>SL261</b> 	100mA to 10A 1 to 100A	100mA to 10A 1 to 100A	100mV/Ac/dc 10mV/Ac/dc	<1.5°	0.46" (11.8mm)	N/A	Lead w/BNC UL
<b>MN261</b> 	0.1 to 24A 0.5 to 240A	—	100mVAc/Ac 10mVAc/Ac	<2.5°	0.78" (19.8mm)	N/A	Lead w/BNC UL
<b>MR461</b> 	0.2 to 40A 0.5 to 400A	0.4 to 60A 0.5 to 600A	10mV/Ac/dc 1mV/Ac/dc	<1.5°	One 1.18" (30mm) Two 0.95" (24mm) 2 x 500kcmil	Two 1.2 x 0.4" (31.5 x 10mm)	Lead w/BNC
<b>MR561</b> 	0.2 to 100A 0.5 to 1000A	0.4 to 150A 0.5 to 1500A	10mV/Ac/dc 1mV/Ac/dc	<1.5°	One 1.5" (39mm) Two 0.98" (25mm)	One 1.96 x 0.49" (50 x 12.5mm) Two 1.96 x 0.19" (50 x 5mm)	Lead w/BNC
<b>SR661</b> 	0.1 to 12A 0.1 to 120A 1 to 1200A	—	100mVAc/Ac 10mVAc/Ac 1mVAc/Ac	<1°	2.05" (52mm)	1.96 x 0.19" (50 x 5mm)	Lead w/BNC UL
<b>JM861</b> 	1 to 30A 1 to 300A 1 to 3000A	—	10mVAc/Ac 1mVAc/Ac 0.1mVAc/Ac	<1°	2.52" (64mm) 2.52 x 3.94" (64 x 100mm)	1.97 x 5.31" (50 x 135mm)	Lead w/BNC

\*Phase shift indicated at maximum rating.

Note: All probes are rated 600V CAT III and CE compliant. Not all models are UL approved; please consult factory.

CATALOG NO.	DESCRIPTION
1201.51	AC/DC Current Probe Model SL261 (10A-100mV/A, 100A-10mV/A, BNC)
2115.82	AC Current Probe Model MN261 (24A-100mV/A, 240A-10mV/A, BNC)
1200.72	AC Current Probe Model MR461 (60A-10mV/A, 600A-1mV/A, BNC)
1200.73	AC Current Probe Model MR561 (150A-10mV/A, 1500-1mV/A, BNC)
2113.49	AC Current Probe Model SR661 (10A-100mV/A, 100A-10mV/A, 1000A-1mV/A, BNC)
2110.90	AC Current Probe Model JM861 (30A-10mV/A, 300A-1mV/A, 3000A-0.1mV/A, BNC)






# CURRENT MEASUREMENT PROBES

## General Purpose Probes Selection Chart

### General Purpose Probes



The most complete line of current probes offering a variety of output options and terminations for recorders, data loggers, oscilloscopes, DMMs and other instruments

Series	Model	Ratio	Measurement Range		Output Signal		Phase Shift**	Maximum Conductor Size		Output Connection	Catalog No.	Price***
			AC	DC	Current	Voltage		Ø Cable	Bus Bar			
	MN01	—	2 to 150A	—	1mA <sub>AC</sub> /A <sub>AC</sub> *	—	N/A	0.39" (10mm)	N/A	Lead	2129.17	
	MN02	1000:1	50mA to 100A 50mA to 90A	—	1mA/A*	—	N/A	0.39" (10mm)	N/A	Lead	2129.20	
	MN03	—	2 to 100A	—	—	1mV/A	N/A	0.39" (10mm)	N/A	Lead	2129.18	
	MN05	—	5mA <sub>AC</sub> to 10A <sub>AC</sub> 1 to 100A <sub>AC</sub>	—	—	1mV <sub>AC</sub> /mA <sub>AC</sub> 1mV <sub>AC</sub> /A <sub>AC</sub>	N/A	0.39" (10mm)		Lead	2129.19	
	MN103	—	1mA to 10A 1 to 100A	—	—	1mV <sub>AC</sub> /mA <sub>AC</sub> 1mV <sub>AC</sub> /A <sub>AC</sub>	N/A	0.47" (12mm)		Lead	1031.02	
	MN106	1000:1	2 to 150A	—	1mA <sub>AC</sub> /A <sub>AC</sub>	—	<10°			Lead	1031.17	
	MN114	—	1mA to 10A	—	—	100mV <sub>AC</sub> /A <sub>AC</sub>	<8°			Lead	2110.71	
	MN185	1000:1	50mA to 120A	—	1mA <sub>AC</sub> /A <sub>AC</sub>	—	<3.5°			Jack	100.185	
	MN213	1000:1	0.5 to 240A	—	1mA <sub>AC</sub> /A <sub>AC</sub> *	—	<2.5°	0.78" (19.8mm)	N/A	Lead	2115.75	
	MN251	—	0.5 to 240A	—	—	1mV <sub>AC</sub> /A <sub>AC</sub>	<2.5°			Lead	2115.77	
	MN253	—	0.5 to 240A	—	—	10mV <sub>AC</sub> /A <sub>AC</sub>	<2.5°			Lead	2115.79	
	MN255	—	0.1 to 24A 0.1 to 240A	—	—	100mV <sub>AC</sub> /A <sub>AC</sub> 10mV <sub>AC</sub> /A <sub>AC</sub>	<2.5°			Lead	2115.81	
	MN291	—	0.5 to 240A	—	—	100mV <sub>DC</sub> /A <sub>AC</sub>	N/A			Lead	2115.84	
	MN307	—	10mA to 12A	—	—	100mV/A <sub>AC</sub>	<2.5°			Lead	2116.23	
	MN312	1000:1	0.1 to 200A	—	1mA <sub>AC</sub> /A <sub>AC</sub> *	—	<2.5°			Jack	2116.24	
	MN313	1000:1	0.1 to 200A	—	1mA <sub>AC</sub> /A <sub>AC</sub> *	—	<2.5°			Lead	2116.25	
	MN352	—	0.1 to 150A	—	—	10mV/A <sub>AC</sub>	<2.5°			Jack	2116.26	
	MN353	—	0.1 to 150A	—	—	10mV/A <sub>AC</sub>	<2.5°			Lead	2116.27	
	MN373	—	0.01 to 2.4A 0.1 to 200A	—	—	1000mV/A <sub>AC</sub> 10mV/A <sub>AC</sub>	<3°			Lead	2116.28	
	MN375	—	0.1 to 10A	—	—	100mV/A <sub>AC</sub>	<1.5°			Lead	2115.41	
	MN379	—	0.005 to 6A 0.1 to 120A	—	—	200mV/A <sub>AC</sub> 10mV/A <sub>AC</sub>	<1.5°			Lead	2153.01	
	SL206	—	10mA to 1.5A 50mA to 60A	10mA to 2A 50mA to 80A	—	1mV/mA <sub>AC</sub> /DC 10mV/A <sub>AC</sub> /DC	<1°	0.46" (11.8mm)	N/A	Lead	1201.45	
	MD301	1000:1	2 to 500A	—	—	1mV <sub>DC</sub> /A <sub>AC</sub>	N/A	1.18" (30mm) 2 x 500kcmil	2.48 x 0.20" (63 x 5mm)	Lead	1201.07	
	MD304	100:1	1 to 600A	—	10mA <sub>AC</sub> /A <sub>AC</sub>	—	<3°			Lead	1201.37	
	MD305	1000:1	1 to 600A	—	1mA <sub>AC</sub> /A <sub>AC</sub>	—	<1°			Lead	1201.36	

\*Diode Protection for open secondary (Output)

\*\*Phase shift indicated at maximum rating

\*\*\*Consult factory for NIST Calibration price

Note: Models MN103, MN106, MN114 & MN185 are not CE compliant. MN200 & MN300 series probes are UL approved.



### General Purpose Probes

**The most complete line of current probes offering a variety of output options and terminations for recorders, data loggers, oscilloscopes, DMMs and other instruments**

SERIES	MODEL	RATIO	MEASUREMENT RANGE		OUTPUT SIGNAL		PHASE SHIFT**	MAXIMUM CONDUCTOR SIZE		OUTPUT CONNECTION	CATALOG NO.	PRICE***
			AC	DC	CURRENT	VOLTAGE		Ø CABLE	BUS BAR			
	SR600	1000:1	0.1 to 1000A	—	1mAac/Aac	—	<0.5°	2.05" (52mm)	1.96 x 0.19" (50 x 5mm)	Jack	2113.42	
	SR601	1000:1	0.1 to 1000A	—	1mAac/Aac*	—	<0.5°			Jack	2113.43	
	SR604	1000:1	0.1 to 1000A	—	1mAac/Aac*	—	<0.5°			Lead	2113.44	
	SR632	1000:5	0.1 to 1000A	—	5mAac/Aac*	—	<1°			Lead	2114.79	
	SR634	250:5 500:5 1000:5	1 to 250A 1 to 500A 1 to 1000A	—	20mAac/Aac 10mAac/Aac 5mAac/Aac*	—	<1°			Jack	2113.48	
	SR651	—	0.1 to 1000A	—	—	1mVac/Aac	<0.5°			Jack	2113.45	
	SR701	1000:1	1mA to 1000A	—	1mAac/Aac*	—	<0.5°			Jack	2116.29	
	SR704	1000:1	1mA to 1000A	—	1mAac/Aac*	—	<0.5°			Lead	2116.30	
	SR752	—	100mA to 1000A	—	—	1mVac/Aac	<0.7°			Lead	2116.32	
	SR759	—	1mA to 1A 10mA to 10A 0.1 to 100A 1 to 1000A	—	—	1000mVac/Aac 100mVac/Aac 10mVac/Aac 1mVac/Aac	<1°			Lead	2116.33	
	JM810A	2000:2	1 to 2000A	—	1mAac/Aac	—	<0.5°	2.52" (64mm)	1.97 x 5.31" (50 x 135mm) 2.52 x 3.94" (64 x 100mm)	Lead	2110.80	
	JM813	3000:3	1 to 2400A	—	1mAac/Aac	—	<0.5°			Jack	2110.93	
	JM830A	3000:1	1 to 2400A	—	.333mAac/Aac	—	<0.5°			Lead	2110.83	
	JM850A	1000:1 2000:1 3000:1	1 to 1000A 1 to 2000A 1 to 2400A	—	1mAac/Aac .5mAac/Aac .333mAac/Aac	—	<0.5°			Jack	2110.87	
	JM865A	1000:5 2000:5 3000:5	1 to 1000A 1 to 2000A 1 to 2400A	—	5mAac/Aac 2.5mAac/Aac 1.67mAac/Aac	—	<0.5°			Jack	2110.88	

\*Diode Protection for open secondary (Output)

\*\*Phase shift indicated at maximum rating

\*\*\*Consult factory for NIST Calibration price

Note: SR series probes are UL approved.

All current probes are available online on our AEMC storefront.



### ► OUTPUT TERMINATIONS

#### Lead with BNC

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



#### Jack

Two standard safety banana jacks (4mm)



#### Leads

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



#### Shrouded Banana Plugs

Two 4mm safety banana plugs; standard 3/4" (19mm) spacing

