

CURRENT MEASUREMENT PROBES

SL SERIES AC/DC CURRENT PROBES

SL SERIES

Compact, long nose probes designed for accurate measurements of low currents with 10mA_{dc} sensitivity, capable of measuring both AC and DC current

SPECIFICATIONS

MODELS	SL206	SL261
ELECTRICAL		
Nominal Range	2A; 80A	10A; 100A _{ac/dc} peak
Measurement Range	10mA to 80A _{dc} 10mA to 60A _{ac}	100 mA to 100A _{ac/dc} peak
Transformation Ratio	Voltage output	
Output Signal	2A: 1mV/mA (2V @ 2A) 80A: 10mV/A (0.8V @ 80A)	10A: 100mV/A (1V @ 10A) 100A: 10mV/A (1V @ 100A)
Phase Shift (DC to 65 Hz) (1mV/mA Range) (10mV/mA Range) (100mV/mA Range)	1° 1° -	- <1° <1.5°
Overload	120A continuous	Red LED indicator
Frequency Range	DC to 8kHz	DC to 100kHz (-3dB with current derating)
Load Impedance	100kΩ (1mV/mA); 10kΩ (1V/A)	>1MΩ/100pF
Working/Common Mode Voltage	600Vrms	
Output Termination	5 ft (1.5m) lead with double insulated 4mm safety banana plugs	6.5 ft (2 m) coaxial cable with insulated BNC terminal
MECHANICAL		
Operating Relative Humidity	10° to 30°C: 85 ± 5% RH (without condensation) 40° to 50°C: 45 ± 5% RH (without condensation)	
Maximum Conductor Size	0.46" (11.8mm)	
Dimensions	9.09 x 1.42 x 2.64" (231 x 36 x 67mm)	
Weight	11.6 oz (330g) with battery	
Material	Polycarbonate UL 94	
ENVIRONMENTAL		
Operating Temperature	32° to 122°F (0° to 50°C)	
Storage Temperature	-22° to 176°F (-30° to 80°C)	
SAFETY		
Electrical	EN 61010-2-32, 600V CAT III	
CE Mark	Yes	
UL Approval	No	Yes

Consult factory for NIST Calibration prices



SL206 W/ BANANA PLUGS



SL261 W/ BNC CONNECTOR



Only SL261

FEATURES

SL SERIES AC/DC CURRENT PROBES






- Low AC and DC measurements
- Measures from 10mA to 100A
- Dual range selection
- Unique design for probing in crowded wiring areas
- Hall effect sensor technology
- UL approved for the US and Canada (not SL206)
- Flame retardant UL94 V2 rated
- Use with DMMs, voltmeters and other voltage measuring instruments

CATALOG NO.	DESCRIPTION
1201.45	AC/DC Current Probe Model SL206 (2A, 1mV/mA & 80A, 10mV/A, Lead)
1201.51	AC/DC Current Probe Model SL261 (10A, 100mV/A & 100A, 10mV/A, BNC)



CURRENT MEASUREMENT PROBES

GENERAL PURPOSE PROBES SELECTION CHART

Series	Model	Ratio	Measurement Range		Output Signal		Phase Shift**	Maximum Conductor Size		Output Connection	Catalog No.
			AC	DC	Current	Voltage		Ø Cable	Bus Bar		
	MN01	1000:1	2 to 150A	–	1mA/A*	–	N/A	0.39" (10mm)	N/A	Leads	2129.17
	MN02	1000:1	50mA to 100A 50mA to 90A	–		–	N/A	0.39" (10mm)	N/A	Leads	2129.20
	MN03	–	2 to 100A	–	–	1mV/A	N/A	0.39" (10mm)	N/A	Leads	2129.18
	MN05	–	5mA to 10A 1 to 100A	–	–	1mV/A 1mV/A	N/A	0.39" (10mm)	N/A	Leads	2129.19
	MN09	–	1 to 150A	–	–	100mVdc/Aac	N/A	0.39" (10mm)	N/A	Leads	2129.21
	MN103	–	1mA to 10A 1 to 100A	–	–	1mV/A 1mV/A	N/A	0.47" (12mm)	N/A	Leads	1031.02
	MN114	–	1mA to 10A	–	–	100mV/A	<8°	0.47" (12mm)	N/A	Leads	2110.71
	MN185	1000:1	50mA to 120A	–	1mA/A	–	<3.5°	0.47" (12mm)	N/A	Jacks	100.185
	MN255	–	0.1 to 24A 0.1 to 240A	–	–	100mV/A 10mV/A	<2.5°	0.78" (19.8mm)	N/A	Leads	2115.81
	MN291	–	0.5 to 240A	–	–	100mVdc/Aac	N/A	0.78" (19.8mm)	N/A	Leads	2115.84
	MN307	–	10mA to 12A	–	–	100mV/A	<2.5°	0.78" (19.8mm)	N/A	Leads	2116.23
	MN312	1000:1	0.1 to 200A	–	1mA/A*	–	<2.5°	0.78" (19.8mm)	N/A	Jacks	2116.24
	MN352	–	0.1 to 150A	–	–	10mV/A	<2.5°	0.78" (19.8mm)	N/A	Jacks	2116.26
	MN353	–		–	–	10mV/A	<2.5°	0.78" (19.8mm)	N/A	Leads	2116.27
	MN375	–	0.1 to 10A	–	–	100mV/A	<1.5°	0.78" (19.8mm)	N/A	Leads	2115.41
	MN379	–	5mA to 6A 0.1 to 120A	–	–	200mV/A 10mV/A		0.78" (19.8mm)	N/A	Leads	2153.01
	SL206	–	10mA to 1.5A 50mA to 60A	10mA to 2A 50mA to 80A	–	1mV/mAac/dc 10mV/Aac/dc	<1°	0.46" (11.8mm)	N/A	Leads	1201.45
	MD301	1000:1	2 to 500A	–	–	1mVdc/Aac	N/A	1.18" (30mm) 2 x 500kc-mil	2.48 x 0.20" (63 x 5mm)	Leads	1201.07

*Output Protection for open secondary

**Phase shift indicated at maximum rating





Note: Models MN103, MN106, MN114 & MN185 are not CE compliant. MN200 & MN300 series are UL approved except MN379.

Consult factory for NIST Calibration price.



CURRENT MEASUREMENT PROBES

GENERAL PURPOSE PROBES SELECTION CHART

SERIES	MODEL	RATIO	MEASUREMENT RANGE		OUTPUT SIGNAL		PHASE SHIFT**	MAXIMUM CONDUCTOR SIZE		OUTPUT CONNECTION	CATALOG NO.
			AC	DC	CURRENT	VOLTAGE		Ø CABLE	BUS BAR		
	MR415	–	0.5 to 400A	0.5 to 600A	–	1mV/A	≤1.5°	1.18" (30mm)	2 bus bar 1.24 x 0.39" (31.5 x 10mm)	5 ft (1.5m) Lead	1200.80
	MR416	–	0.5 to 40A 0.5 to 400A	0.5 to 60A 0.5 to 600A	–	10mV/A 1mV/A	≤2.2° ≤1.5°	1.53" (39mm)	2 bus bar 1.95 x 0.19" (50 x 5mm)	5 ft (1.5m) Lead	1200.81
	MR526	–	0.5 to 100A 0.5 to 1000A	0.5 to 150A 0.5 to 1400A	–	10mV/A 1mV/A	≤2° ≤1.5°	1.53" (39mm)	2 bus bar 1.95 x 0.19" (50 x 5mm)	5 ft (1.5m) Lead	1200.83
	SR601	1000:1	0.1 to 1200A	–	1mA/A*	–	<0.5°	2.05" (52mm)	1.95 x 0.19" (50 x 5mm)	Jacks	2113.43
	SR604	1000:1	0.1 to 1200A	–	1mA/A*	–	<0.5°	2.05" (52mm)	1.95 x 0.19" (50 x 5mm)	Leads	2113.44
	SR651	–	0.1 to 1200A	–	–	1mV/A	<0.5°	2.05" (52mm)	1.95 x 0.19" (50 x 5mm)	Jacks	2113.45
	SR701	1000:1	1mA to 1000A	–	1mA/A*	–	<0.7°	2.05" (52mm)	1.95 x 0.19" (50 x 5mm)	Jacks	2116.29
	SR704	1000:1	1mA to 1000A	–	1mA/A*	–	<0.7°	2.05" (52mm)	1.95 x 0.19" (50 x 5mm)	Leads	2116.30
	SR752	–	0.1 to 1000A	–	–	1mV/A	<0.7°	2.05" (52mm)	1.95 x 0.19" (50 x 5mm)	Leads	2116.32
	SR759	–	1mA to 1A 10mA to 10A 0.1 to 100A 1 to 1000A	–	–	1000mV/A 100mV/A 10mV/A 1mV/A	<1°	2.05" (52mm)	1.95 x 0.19" (50 x 5mm)	Leads	2116.33
	K100	–	0.1mA to 3A	0.05mA to ±4A	–	1mV/mA	N/A	0.18" (4.5 mm)	N/A	Plugs	1200.67
	K110	–	0.1mA to 300mA	0.05mA to ±450mA	–	10mV/mA	N/A		N/A	Plugs	2111.73
	LM102	1000:1	50mA to 200A	–	1mA/A*	–	<3°	0.63" (16 mm)	N/A	Leads	2153.04
	LM103	–	0.1 to 200A	–	–	1mV/A	<3°		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 (2m) coaxial cable with insulated BNC connector rated 600Vrms



Jacks

Two standard safety banana jacks (4mm)



Leads

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







Shrouded Banana Plugs

Two 4mm safety banana plugs; standard ¾" (19mm) spacing










AMPFLEX® AND MINIFLEX® PROBES - SELECTION CHARTS

SERIES	MODEL	RATIO	MEASUREMENT RANGE	OUTPUT SIGNAL	MAXIMUM CONDUCTOR SIZE	CATALOG NO.
	MF 300-10-2-10-HF	–	30A / 300A	100mV/A, 10mV/A	2.95" (70mm)	2126.84
	MA114	–	3A / 30A / 300A / 3000A	1mV/mA, 100mV/A 10mV/A, 1mV/A	4" (101mm)	2153.41
	300-24-2-10	–	30A / 300A	100mV/A, 10mV/A	7.48" (190mm)	2112.88
	1000-24-1-1	–	1000A	1mV/A	7.48" (190mm)	2112.39
	1000-24-2-1	–	100A / 1000A	10mV/A, 1mV/A	7.48" (190mm)	2112.98
	1000-36-2-1	–	100A / 1000A	10mV/A, 1mV/A	11" (290mm)	2113.00
	3000-24-1-1	–	3000A	1mV/A	7.48" (190mm)	2112.46
	3000-36-1-1	–			11" (290mm)	2112.48
	3000-24-2-1	–	300A / 3000A	10mV/A, 1mV/A	7.48" (190mm)	2113.05
	6000-36-2-0.1	–	600A / 6000A	1mV/A, 0.1mV/A	11" (290mm)	2113.21
	30000-24-2-0.1	–	3000A / 30,000A		7.48" (190mm)	2113.33
	24-3001	–	300A / 3000A _{AC}	10mV/A, 1mV/A	7.48" (190mm)	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			Ø CABLE	BUS BAR	
 SL261	100mA to 10A 1 to 100A		100mV/A 10mV/A	<1.5°	0.46" (11.8mm)	N/A	6.5 ft (2m) Lead w/BNC
 MN261	0.1 to 24A 0.5 to 240A	–		<2.5°	0.78" (19.8mm)		
 SR661	0.1 to 12A 0.1 to 120A 1 to 1200A		100mV/A 10mV/A 1mV/A	<1°	2.05" (52mm)	1.96 x 0.19" (50 x 5mm)	
 MN251T MN379T	0.5 to 240A 0.005 to 6A 0.1 to 120A		1mV/A 200mV/A 10mV/A	<2.5° <4° <2.2°	0.78" (20mm)	0.78" (20mm)	10 ft (3m) Lead w/BNC
 MH60	0.5 to 100A	0.5 to 100A	10mV/A	<1°	1.02" (26mm)	N/A	6.6 ft (2m) Lead w/BNC
 MR417	0.5 to 40A 0.5 to 400A	0.5 to 60A 0.5 to 600A	10mV/A 1mV/A	≤2.2° ≤1.5°	1.18" (30mm)	2 bus bar 1.24 x 0.39" (31.5 x 10mm)	
 MR527	0.5 to 100A 0.5 to 1000A	0.5 to 150A 0.5 to 1400A		≤2.2° ≤1.5°	1.53" (39mm)	2 bus bar 1.96 x 0.19" (50 x 5mm)	

*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. Consult factory for NIST Calibration price.

