



Current Probes for use with  
MAVOWATT | 20 | 30 | 40 | 70 & MAVOSYS | 10

# Current Probes for use with MAVOWATT 20/30/40/70 and MAVOSYS 10



There are many possible current probe options available from Gossen Metrawatt to fulfill your current measurement requirements for both MAVOWATT and MAVOSYS instruments. Many of these current probes connect directly into the MAVOWATT 20/30/40/70 and MAVOSYS 10. For the MAVOSYS 10 a 61MAC input module allows connection of the available current probes to the instrument.

## Clamp-On










Clamp-on type probes are available to measure as low as 0.1 A to a maximum of 3000 Amps in various ranges. Also, there are available clamp-on probes that measure both AC and DC currents.

## Flexible Probes

These type of probes are available in three lengths 60 cm, 90 cm and 120 cm lengths which allow monitoring currents up to 6000 Amps full scale.

## AC Clamp-On Probes






Clamp-on type probes are available in the following ranges as low as 0.1 A up to 3000 A AC. All of the probes listed below plug directly into the MAVOWATT 20/30/40/70 family of products, as well as the MAVOSYS 10 current module 61MAC.

Product Number	Range		Amplitude Accuracy ± % rdg @ 45 - 65 Hz	Phase Accuracy ± deg. @ 45 - 65 Hz	Frequency Range	Maximum Conductor Size
 <b>TR2500</b>	10A - 500A AC	10A - 500 A	1.5% rdg. +0.6A	< 4°	48Hz - 1KHz	Ø 30mm 2 x Ø 25mm □ 65 x 5mm
 <b>TR2500A</b>	10A - 500A AC	100A - 500A	1%	1.5°	40Hz - 5KHz	Ø 50mm
		10A - 100A	2%	3°		
 <b>TR2501</b>	100mA - 1.2A AC	1.2A	1.5%	1°	40Hz - 5KHz	Ø 15mm
		100mA	1.5%	2°		
 <b>TR2510</b>	1A - 10 A AC	1A - 10 A	1%	1.5°	40Hz - 3KHz	Ø 20mm
 <b>TR2510A</b>	1A - 10A AC	5A - 10A	1.2%	1.5°	40Hz - 5KHz	Ø 15mm
		1A - 5A	2%	1°		
 <b>TR2520A</b>	100A - 3000A AC	1000A - 3000A	0.5%	0.5°	40Hz - 5KHz	Ø 72mm □ 100 x 46mm □ 126 x 35mm
		300A - 1000A	0.75%	0.75°		
		100A - 300A	1.5%	1.5°		
 <b>TR2530A</b>	20A - 300A AC	50A - 300A	1%	0.5°	30Hz - 5KHz	Ø 54mm
		20A - 50A	1.5%	0.6°		
 <b>TR2540A</b>	10A - 1000A AC	100A - 1000A	1%	0.4°	30Hz - 5KHz	Ø 54mm
		10A - 100A	1.5%	0.5°		
 <b>TR2550A</b>	1A - 100A AC	10A - 100A	1%	2.5°	40Hz - 10KHz	Ø 15mm
		1A - 10A	2%	5°		

Transient Accuracy: ±10% of Reading ±0.5% full scale, ≥10 µsec

## AC Clamp-On Probes


The probes listed below were originally designed to plug directly into a Dranetz-BMI Model 658 and require an adapter cable. The CA4300 adapter cable converts the model 658 probe connector to a hypertronics type connector that allows the following probes to plug directly into the MAVOWATT 20/30/40/70 family of products, as well as the MAVOSYS 10 current module 61MAC.

Product Number	Range		Amplitude Accuracy ± % rgd. @ 45 – 65 Hz	Phase Accuracy ± deg. @ 45 – 65 Hz	Frequency Range	Maximum Conductor Size
 <b>TR2019B</b>	50A - 300A AC	300A	1%	1.5°	30Hz - 5KHz	Ø 52mm
		200A	1.5%	1.5°		
		50A	3%	3°		
 <b>TR2021</b>	1A - 30A AC	1A - 30A	1%	3°	40Hz - 10KHz	Ø 20mm
 <b>TR2022A</b>	10A - 1000A AC	200A - 1000A	0.75%	0.75°	30Hz - 5KHz	Ø 54mm
		50A - 200A	1.5%	1.5°		
		10A - 50A	3%	3°		
 <b>TR2023</b>	200A - 3000A AC	200A - 3000A	1%	1°	30Hz - 5KHz	Ø 65mm 5x □ 5x125mm 3x □ 10x100mm
 <b>CA4300</b>		Required to allow connection of TR2019B, TR2021, TR2022A, or TR2023 current probe to MAVOWATT 20/30/40/70 family, or MAVOSYS 10 module 61MAC				

Transient Accuracy: ±10% of Reading ±0.5% full scale, ≥10 µsec

## TR and PR Series Extension Cables




Allows extension of TR and PR series probes with hypertronics connectors to increase probe cable length available in six different lengths.

Product Number	Plug Type	Cable Length
<b>TREXT5</b> <b>TREXT10</b> <b>TREXT15</b> <b>TREXT20</b> <b>TREXT25</b> <b>TREXT30</b>	 Male hypertronics connects to MAVOWATT 20/30/40/70 or MAVOSYS10 with 61MAC Female hypertronics connects to TR or PR Series probes	1.5m (5ft) 3 m (10ft) 4.5m (15ft) 6 m (20ft) 7.5m (25ft) 9m (30ft)

\* One extension cable required per probe.

## AC / DC Clamp-On Probes




Clamp-on type probes are available in two ranges 150A and 1500 A AC/DC and available battery power only or powered by 9 VDC wall adapter only.

Product Number	Range		Amplitude Accuracy ± % rgd. @ 45 – 65 Hz	Phase Accuracy ± deg. @ 45 – 65 Hz	Frequency Range	Maximum Conductor Size
 <b>PR150/SP1</b> * Requires AC Adapter	15A - 150A AC/DC	15A - 150A	1%	3°	DC - 5KHz	Ø 52mm
 <b>PR150/SP2</b> 9V Battery Only	15A - 150A AC/DC	15A - 150A	1%	3°	DC - 5KHz	Ø 52mm
 <b>PR1500/SP7</b> * Requires AC Adapter	150A - 1500A AC/DC	150A - 1500A	1%	3°	DC - 5KHz	Ø 52mm
 <b>PR1500/SP8</b> 9V Battery Only	150A - 1500A AC/DC	150A - 1500A	1%	3°	DC - 5KHz	Ø 52mm

Transient Accuracy: ±10% of Reading ±0.5% full scale, ≥10 µsec

## AC / DC Clamp-On Probes Accessories


Additional available accessory for the clamp on probes allows the probe to be powered by an ac adapter ideal for long term monitoring and worry free from batteries being depleted.

Product Number		Input Voltage	Input Plug Type	Output Plug Type	Polarity	Output
ACADP-PR9V-US		120 VAC, 60 Hz	US	5.5mm X 2.1mm (female)	Center pin positive	+ 9VDC 200mA
ACADP-PR9V-EU		230 VAC, 50 Hz	EURO	5.5mm X 2.1mm (female)	Center pin positive	+ 9VDC 500mA
ACADP-PR9V-UK		230 VAC, 50 Hz	UK	5.5mm X 2.1mm (female)	Center pin positive	+ 9VDC 500mA

\* One AC adapter required per probe.

## Flexible AC Clamp-On Probes




These types of probes are available in three lengths 60cm, 90cm, and 120cm lengths and available in two maximum ranges of 3000 A RMS and 6000 A RMS. Each probe can be powered by battery or AC adapter and multiple probes can be powered by a single AC adapter.

Product Number	Range		Amplitude Accuracy ± % rgd. @ 45 – 65 Hz	Phase Accuracy ± deg. @ 45 – 65 Hz	Frequency Range	Maximum Conductor Size
 <b>DRANFLEX 3000XL</b>	3A - 3000A (3 ranges)	3A - 30A	± 1% ± 0.1A	1°	10 Hz - 10 kHz	60cm length, up to Ø 20cm 90cm length, up to Ø 28cm 120cm length, up to Ø 43cm
		30A - 300A	± 1% ± 0.1A	1°		
		300 - 3000A	± 1% ± 1A	1°		
 <b>METRAFLEX 3001XL</b>	3A - 3000A (3 ranges)	3A - 30A	± 1% ± 0.1A	1°	10 Hz - 10 kHz	60cm length, up to Ø 20cm
		30A - 300A	± 1% ± 0.1A	1°		
		300 - 3000A	± 1% ± 1A	1°		
 <b>DRANFLEX 6000XL</b>	6A - 6000A (3 ranges)	6A - 60A	± 1% ± 0.1A	1°	10 Hz - 10 kHz	60cm length, up to Ø 20cm 90cm length, up to Ø 28cm 120cm length, up to Ø 43cm
		60A - 600A	± 1% ± 0.1A	1°		
		600A - 6000A	± 1% ± 1A	1°		
 <b>DRANFLEX 3003XL</b>	3 PHASE	3A - 30A	±1% ± 0.1A	1°	10 Hz - 10 kHz	60cm length, up to Ø 20cm 90cm length, up to Ø 28cm 120cm length, up to Ø 43cm
	3A - 3000A (3 ranges)	30A - 300A	± 1% ± 0.1A	1°		
		300 - 3000A	± 1% ± 1A	1°		
 <b>METRAFLEX 3003XL</b>	3 PHASE	3A - 30A	±1% ± 0.1A	1°	10 Hz - 10 kHz	60cm length, up to Ø 20cm
	3A - 3000A (3 ranges)	30A - 300A	± 1% ± 0.1A	1°		
		300 - 3000A	± 1% ± 1A	1°		
 <b>DRANFLEX 6003XL</b>	3 PHASE	6A - 60A	± 1% ± 0.1A	1°	10 Hz - 10 kHz	60cm length, up to Ø 20cm 90cm length, up to Ø 28cm 120cm length, up to Ø 43cm
	6A - 6000A (3 ranges)	60A - 600A	± 1% ± 0.1A	1°		
		600A - 6000A	± 1% ± 1A	1°		
 <b>RR3035A</b>	3A - 3000A (3 ranges)	3A - 30 A	± 0.3A	1°	10 Hz - 10 kHz	60cm length, up to Ø 20cm 90cm length, up to Ø 28cm 120cm length, up to Ø 43cm
		30A - 300A	± 3A	1°		
		300A - 3000A	± 30A	1°		
 <b>RR6035A</b>	6A - 6000A (3 ranges)	6A - 60A	± 0.6A	1°	10 Hz - 10 kHz	60cm length, up to Ø 20cm 90cm length, up to Ø 28cm 120cm length, up to Ø 43cm
		60A - 600A	± 6A	1°		
		600A - 6000A	± 60A	1°		
 <b>CA4300BNC</b>			Required to allow connection of RR3035A or RR6035A flexible probes to MAVOWATT 20/30/40/70 family, or MAVOSYS 10 module 61MAC instruments. One adapter cable required for each probe to be connected to the MAVOWATT or MAVOSYS instruments.			

Transient Accuracy: ±10% of Reading ±0.5% full scale, ≥10 µsec


## Flexible Probe Accessories

Additional available accessory for the flexible probe allows the probe to be powered by an ac adapter ideal for long term monitoring and worry free from batteries being depleted.

Product Number		Input Range	Input Plug Type	Output Plug Type	Polarity	Output Voltage
RR/PSUS		120 VAC, 60 Hz	US	5.5mm X 2.1mm (female)	Center pin negative	+ 3VDC 1A
RR/PSEURO		230 VAC, 50 Hz	EURO	5.5mm X 2.1mm (female)	Center pin negative	+ 3VDC 1A
RR/PSUK		230 VAC, 50 Hz	UK	5.5mm X 2.1mm (female)	Center pin Negative	+ 3VDC 1A

### Flexible Probe 3 VDC Power Cable for MAVOWATT 20/30/40/70 Family and MAVOSYS 10


Allows 3 VDC power connections up to four flexible probes from MAVOWATT 20/30/40/70 instrument only. This cable connects to either the AC Adapter output of RR/PSUS, RR/PSEURO, or RR/PSUK 3VDC adapters and up to four flexible probes. It can also be connected to one of the output plugs of the DC3VFLEX power cable for MAVOSYS 10 in order to increase the number of flexible probes to be powered.

Product Number	Output Plug Type	Cable Length	Power Connection	
RR/PS/4A		5.5 mm X 2.1 mm (female)	1.7m (68")	Connects to RR/PSUS RR/PSEURO RR/PSUK DC3VFLEX

Note: Not for use with PR150 or PR1500 series probes each probe is required to be powered individually by a single AC adapter for each probe.


### Flexible Probe 3 VDC Power Cable for MAVOSYS 10

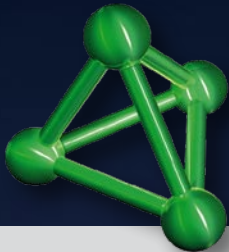
Allows 3 VDC power connections up to four flexible probes from MAVOSYS 10 instrument only. This cable connects directly from the MAVOSYS 10 mainframe and up to four flexible probes.

Product Number	Output Plug Type	Cable Length	Power Connection	
DC3VFLEX		5.5mm X 2.1mm (female)	1.3m (53")	Connects to 61PS module of MAVOSYS 10 only

### Flexible Probe Extension Cable for MAVOSYS 10

Allows extension of cable length of DC3VFLEX cable by length of 3m and 6m.

Product Number	Plug Type	Cable Length	Power Connection
DC3VFLEXEXT10		Male connects to MAVOSYS 10	Connects to 61PS module of MAVOSYS 10 only
DC3VFLEXEXT20		Female connects to DC3VFLEX	



**GMC-I Messtechnik GmbH**

Südwestpark 15  
D - 90449 Nürnberg  
Telefon: +49 911 8602-111  
Telefax: +49 911 8602-777  
E-Mail: [info@gossenmetrawatt.com](mailto:info@gossenmetrawatt.com)  
[www.gossenmetrawatt.com](http://www.gossenmetrawatt.com)