



## Current Probes for use with PX5/4400/PowerVisa and Encore Series 61000



There are many possible current probe options available from Dranetz-BMI to fulfill your current measurement requirements for both Dranetz-BMI PX5/4400 and Encore Series 61000 Monitoring instruments. Many of these current probes connect directly into the PX5/4400 and Encore Series 61000 instruments. For the Encore Series 61000 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 24 inches, 36 inches, and 48 inch 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 RMS. All of the probes listed below plug directly into the PX5 family of products as well as the Series 61000 current module 61MAC.

Product Number	Range		Amplitude Accuracy $\pm$	Phase Accuracy $\pm$	Frequency Range	Maximum Conductor Size
TR2500	10A to 500 Arms	10A to 500 Arms	1.5% of reading +0.6A	< 4°	48Hz-1kHz	30mm dia.
TR2500A	10A to 500 Arms	100A to 500A	1%	1.5°	40Hz to 5KHz	50mm dia.
		10A to 100A	2%	3°		
TR2501	100mA to 1.2 Arms	1.2A	1.5%	1°	40Hz to 5KHz	15mm dia.
		100mA	1.5%	2°		
TR2510	1A to 10 Arms	1A to 10 A	1%	1.5°	40Hz to 3 KHz	20 mm dia.
TR2510A	1A to 10 Arms	5A to 10A	1.2%	1.5°	40Hz to 5KHz	15mm dia.
		1A to 5A	2%	1°		
TR2520A	100A to 3000 Arms	1000A to 3000A	0.5%	0.5°	40Hz to 5KHz	72mm dia.*
		300A to 1000A	0.75%	0.75°		
		100A to 300A	1.5%	1.5°		
TR2530A	20A to 300 Arms	50A to 300A	1%	0.5°	30Hz to 5KHz	54mm dia.
		20A to 50A	1.5%	0.6°		
TR2540A	10A to 1000A	100A to 1000A	1%	0.4°	30Hz to 5KHz	54mm dia.
		10A to 100A	1.5%	0.5°		
TR2550A	1A to 100 Arms	10A to 100A	1%	2.5°	40Hz to 10KHz	15mm dia.
		1A to 10A	2%	5°		

Transient Accuracy:  $\pm 10\%$  of Reading,  $\pm 0.5\%$  Full scale,  $\geq 10 \mu\text{Sec}$

\* or bus bar

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 PX5 family of products as well as the Series 61000 current module 61MAC.

Product Number	Range		Amplitude Accuracy $\pm$	Phase Accuracy $\pm$	Frequency Range	Maximum Conductor Size
TR2019B 	50A to 300A	300A	1%	1.5°	30Hz to 5KHz	52mm
		200A	1.5%	1.5°		
		50A	3%	3°		
TR2021 	1A to 30A	1A to 30A	1%	3°	40Hz to 10KHz	20mm dia.
TR2022A 	10A to 1000A	200A to 1000A	0.75%	0.75°	30Hz to 5KHz	54mm dia.
		50A to 200A	1.5%	1.5°		
		10A to 50A	3%	3°		
TR2023 	200A to 3000A	200A to 3000A	1%	1°	30Hz to 5KHz	65mm dia.*
CA4300 		Required to allow connection of TR2019B, TR2021, TR2022A, or TR2023 current probe to PX5 family or Encore Series 61000 module 61MAC				

Transient Accuracy:  $\pm 10\%$  of Reading,  $\pm 0.5\%$  Full scale,  $\geq 10$  uSec

\* or bus bar



## 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 $\pm$	Phase Accuracy $\pm$	Frequency Range	Maximum Conductor Size
PR150/SP1  * Requires AC Adapter	15A to 150A	15A to 150A	1%	3°	DC to 5KHz	52mm dia.
PR150/SP2  9V Battery Only	15A to 150A	15A to 150A	1%	3°	DC to 5KHz	52mm dia.
PR1500/SP7  * Requires AC Adapter	150A to 1500A	150A to 1500A	1%	3°	DC to 5KHz	52mm dia.
PR1500/SP8  9V Battery Only	150A to 1500A	150A to 1500A	1%	3°	DC to 5KHz	52mm dia.

Transient Accuracy:  $\pm 10\%$  of Reading,  $\pm 0.5\%$  Full scale,  $\geq 10$  uSec

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

\* One AC adapter required per probe.

## Flexible Probes

These types of probes are available in three lengths 24 inches, 36 inches, and 48 inch 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 $\pm$	Phase Accuracy $\pm$	Frequency Range	Maximum Conductor Size
<b>DRANFLEX 3000XL</b> 	3A to 3000A (3 ranges)	3A to 30A	$\pm 1$ reading $\pm 0.1$ A	$^{\circ}1$	10 Hz To 10 kHz	24 in. length up to 8 in. diameter 36 in. length up to 11 in. diameter 48 in. length up to 17 in. diameter
		30A to 300A	$\pm 1$ reading $\pm 0.1$ A	$^{\circ}1$		
		300 to 3000A	$\pm 1$ reading $\pm 1$ A	$^{\circ}1$		
<b>DRANFLEX 6000XL</b> 	6A to 6000A (3 ranges)	6A to 60A	$\pm 1$ reading $\pm 0.1$ A	$^{\circ}1$	10 Hz To 10 kHz	24 in. length up to 8 in. diameter 36 in. length up to 11 in. diameter 48 in. length up to 17 in. diameter
		60A to 600A	$\pm 1$ reading $\pm 0.1$ A	$^{\circ}1$		
		600A to 6000A	$\pm 1$ reading $\pm 1$ A	$^{\circ}1$		
<b>RR3035A</b> 	3A to 3000A (3 ranges)	3A to 30A	$\pm 0.3$ A	$^{\circ}1$	10 Hz To 50 kHz	24 in. length up to 8 in. diameter 36 in. length up to 11 in. diameter 48 in. length up to 17 in. diameter
		30A to 300A	$\pm 3$ A	$^{\circ}1$		
		300 to 3000A	$\pm 30$ A	$^{\circ}1$		
<b>RR6035A</b> 	6A to 6000A (3 ranges)	6A to 60A	$\pm 0.6$ A	$^{\circ}1$	10 Hz To 50 kHz	24 in. length up to 8 in. diameter 36 in. length up to 11 in. diameter 48 in. length up to 17 in. diameter
		60A to 600A	$\pm 6$ A	$^{\circ}1$		
		600A to 6000A	$\pm 60$ A	$^{\circ}1$		
<b>CA4300BNC</b> 		Required to allow connection of RR3035A or RR6035A flexible probes to PX5 family or Encore Series 61000 module 61MAC instruments. One adapter cable required for each probe to be connected to the PX5 or Encore Series instruments.				

Transient Accuracy:  $\pm 10\%$  of Reading,  $\pm 0.5\%$  Full scale,  $\geq 10$  uSec

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	5.5 mm X 2.1 mm (female)	Center pin negative +3 VDC 1 A
RR/PSEURO		230 VAC, 50 Hz	EURO	5.5 mm X 2.1 mm (female)	Center pin negative +3 VDC 1 A
RR/PSUK		230 VAC, 50 Hz	UK	5.5 mm X 2.1 mm (female)	Center pin Negative +3 VDC 1 A

### **Flexible Probe 3 VDC Power Cable for Encore Series**

Allows 3 VDC power connections up to four flexible probes from Encore Series 61000 instrument only. This cable connects directly from the Encore Series 61000 mainframe and up to four flexible probes.

Product Number		Output Plug Type	Polarity	Power Connection
DC3VFLEX		5.5 mm X 2.1 mm (female)	Center pin Negative	Connects to 61PS module of Encore Series 61000 only

### **Flexible Probe 3 VDC Power Cable for PX5 family**

Allows 3 VDC power connections up to four flexible probes from PX5 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.

Product Number		Output Plug Type	Polarity	Power Connection
RR/PS/4A		5.5 mm X 2.1 mm (female)	Center pin Negative	Connects to RR/PSUS RR/PSEURO RR/PSUK 3VDC AC Adapter

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.

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Specifications are subject to change without notice.