





## 90M9-AG & 90M9

Invasive mA / mAs

For use with Accu-Gold, Rapid-Gold (90M9-AG) & Accu-Pro, Accu-kV (90M9). The 90M9-AG and 90M9 are invasive sensors.

The mAs sensor connects to models Accu-Gold / Rapid-Gold / Accu-Pro / Accu-kV and to the X-ray generator with safety-shrouded banana jacks. The jacks are not polarity sensitive. It is intended to be inserted in series with the X-ray generator return.

The Accu-Pro and Accu-kV require a kV sensor in-beam as a trigger source.

The 90M9-AG and 90M9 measure DC current. When measuring AC current, we recommend using Model 90M9-BR.



## Accessory Model 90M9-BR 90M9 mAs Sensor Bridge

DESCRIPTION:: The 90M9 was designed to measure DC current. On older single-phase generators where the mA tap is placed before the rectifier circuit, the current will be AC. The 90M9 cannot measure AC current, thus leading to low (false) mA readings. Therefore, one should use a full-wave bridge rectifier like the 90M9-BR to rectify the generator current and then plug the 90M9 into the bridge.

1 x 9.0 V Alkaline

Made gow	O NON INVASIVE THE CLAMP

## 90M10-AG & 90M10

Non-Invasive clamp on mA / mAs

For use with Accu-Gold, Rapid-Gold (90M10-AG) & Accu-Pro, Accu-kV (90M10). The 90M10-AG and 90M10 are Non-Invasive Clamp on Sensors.

The mAs sensor connects to models Accu-Gold / Rapid-Gold / Accu-Pro / Accu-kV and couples to the X-ray generator by clamping to the X-ray anode HV cable (clamps up to 23mm diameter).

The Accu-Pro and Accu-kV require a kV sensor in-beam as a trigger source.

To measure Anode current, clamp on the anode cable with the arrow on the clamp pointing towards the X-ray tube. For best results, do not move clamp before and during a measurement or place next to the X-ray tube.

Caution: In the presence of strong electromagnetic fields, performance may degrade up to 1 Amp.

for use with: TOUCH / Accu-Gold / Rapid-Gold / Accu-Pro				
	KEY FEATURES		KEY FEATURES	
<ul> <li>Automatic power cor</li> <li>Automatic zero.</li> <li>Measurement synchr</li> <li>.001 to 9999 mAs an no range switching.</li> <li>Measures absolute vanoise rejection).</li> <li>mA-waveform availat software for Accu-Go</li> <li>Accu-Pro &amp; Accu-kV. 2.33-kHz -3-dB banc</li> </ul>	ntrol extends battery lifetime. ronized to kV waveform. d 10 uA to 2A dynamic range with alue (no rectifier drop and optimum ole to an external PC using a Accu-Gold old & Rapid-Gold, an Excel spreadsheet for	<ul> <li>Automatic power control extends battery lifetime.</li> <li>Automatic zero.</li> <li>Measurement synchronized to kV waveform.</li> <li>Maximum 9999 mAs and 0.7mA (RMS noise) to 2A dynamic range with no range switching.</li> <li>Measures absolute value (no rectifier drop and optimum noise rejection).</li> <li>Measures absolute value of mA.</li> <li>mA-waveform available to an external PC using a Accu-Gold software for Accu-Gold &amp; Rapid-Gold, an Excel spreadsheet for Accu-Pro &amp; Accu-kV.</li> </ul>		
SPECIFICATIONS / TECHNICAL DATA: All specifications subject to change.		SPECIFICATIONS / TECHNICAL DATA: All specifications subject to change.		
Full-scale:	2000 mA or 9999 mAs	Range:	2000 mA or 9999 mAs (2-2000 mA when used with 9095)	
mA accuracy:	0.2% of reading at dc plus resolution of +/-0.015 mA or 3-4 digits	mA accuracy:	$\pm4\%$ of reading (Limited by 0.7mA RMS noise below 18mA).	
mAs accuracy:	(1-s pulse): 5 uAs or 0.2% of reading; resolution of 0.001 mAs.	mAs accuracy (1-s pulse):	$\pm4\%$ of reading (Limited by 0.7mA RMS noise below 18mA).	
Absolute value of bi-polar:	720 Hz waveform accurate to 2.5%.	Bandwidth:	2.33 kHz, -3 dB.	
Bandwidth:	2.33 kHz, -3 dB.	ON/OFF:	Controlled from Accu-Gold software (Accu-Gold/Rapid-Gold)	
ON/OFF:	Controlled from Accu-Gold software (Accu-Gold/Rapid-Gold) or control unit (Accu-Pro/Accu-kV).	Batteries:	2 x IEC-LR6 (1.5V AA Alkaline) Lifetime: Approximately 35 operating hours.	

Radcal

**Batteries:**