
Data Sheet

Mini Clamp 6/60A

December 2014 | V3 | SMX-1123-0103



G4500/ 3500 Portable Power Quality Analyzer Optional Accessory



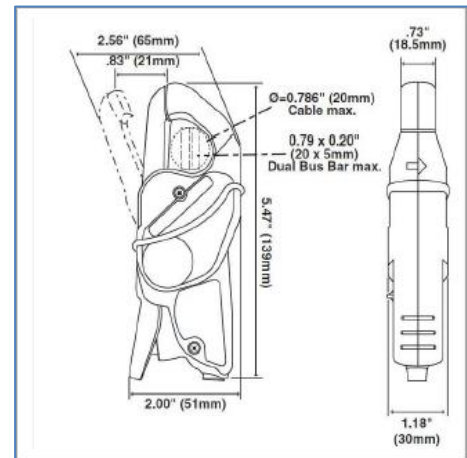
6/60A Mini Clamp

Elspec P/N	SOA-0010-0500
Bandwidth	40 Hz ÷ 10 kHz
Output Signal	100 mV AC/A AC
Measurement Range	Up to 6A AC (1A Nominal)
	Up to 60A AC (10A Nominal) - Selectable software range
Operating Environment	-20°C to +60°C
Cable Length	1.2m



Expected Accuracy of Calibrated Clamp

Every Current Clamp is calibrated at Elspec for a specific current channel of a particular BlackBox Portable in order to optimize the accuracy of the clamp. The current clamp is used as an accessory for both the G4500 & G3500 BlackBox Portable Power Quality Analyzer.



Expected Calibration Accuracy per Current Measurement Channel

Up to 6A

Range [A]	Accuracy [%]	Phase Shift [°]
0.02-0.8	$\leq 0.15 \pm 0.5\text{mA}$	≤ 2
0.8-6		≤ 0.15

Up to 60A

Range [A]	Accuracy [%]	Phase Shift [°]
0.2 - 6	$\leq 0.2 \pm 10\text{mA}$	≤ 2
6 - 60		≤ 0.8

Expected Harmonic- Calibration Accuracy per Current Measurement Channel

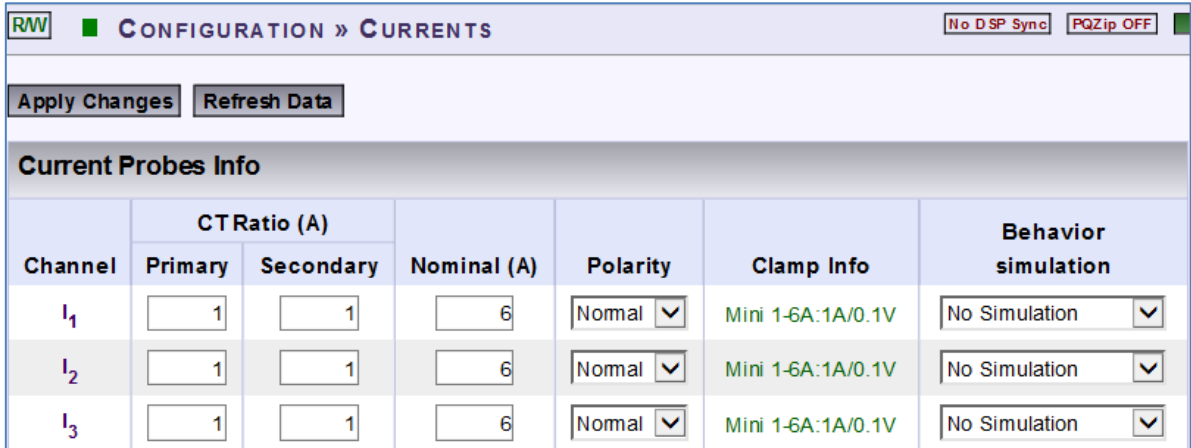
Harmonic Range	Accuracy [%]*
H2 - H60	≤ 2
H61 - H100	≤ 4

Selectable software range

The mini clamp measuring range is configurable and can be set to one of two ranges on the unit web interface.

Up to 6A

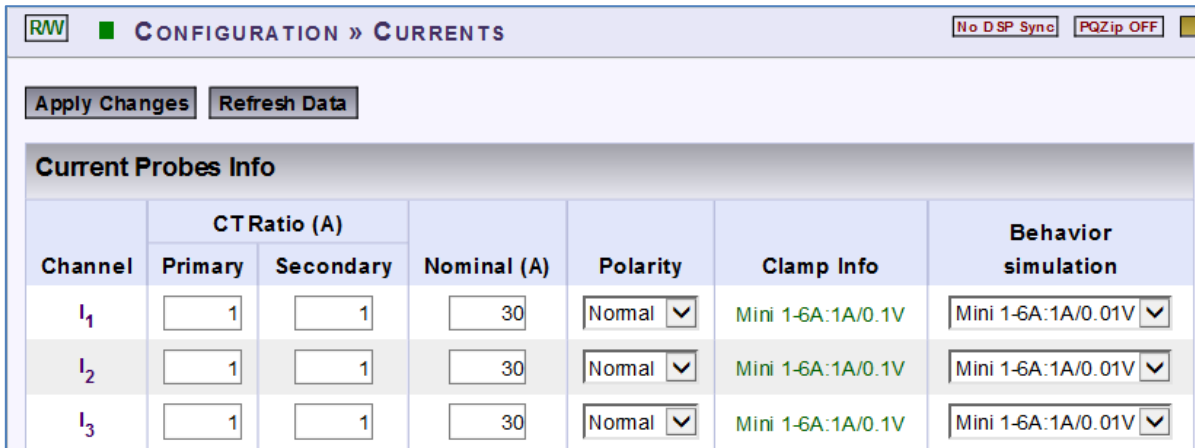
Configuration → Currents → Behavior simulation - No Simulation



Channel	CTR Ratio (A)		Nominal (A)	Polarity	Clamp Info	Behavior simulation
	Primary	Secondary				
I ₁	1	1	6	Normal	Mini 1-6A:1A/0.1V	No Simulation
I ₂	1	1	6	Normal	Mini 1-6A:1A/0.1V	No Simulation
I ₃	1	1	6	Normal	Mini 1-6A:1A/0.1V	No Simulation

Up to 60A

Configuration → Currents → Behavior simulation - Mini 1-6A 1A/0.01V



Channel	CTR Ratio (A)		Nominal (A)	Polarity	Clamp Info	Behavior simulation
	Primary	Secondary				
I ₁	1	1	30	Normal	Mini 1-6A:1A/0.1V	Mini 1-6A:1A/0.01V
I ₂	1	1	30	Normal	Mini 1-6A:1A/0.1V	Mini 1-6A:1A/0.01V
I ₃	1	1	30	Normal	Mini 1-6A:1A/0.1V	Mini 1-6A:1A/0.01V

After the simulation behavior is set select **Apply Changes**