

# Spinlab

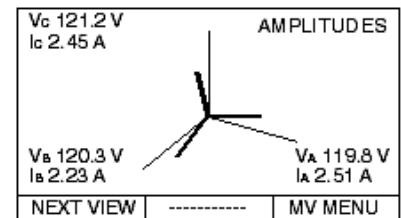
## Bird Dog Plus—Model 5000 to 6000 Upgrade In-Service Tester for CT's and Secondary Circuits and All Meters (Including CT-Rated, Self-Contained, and Residential)

**Now lost revenue can be quickly and easily identified by testing your meter circuits and all meters, including CT-rated, 3 phase self-contained, and residential! Weighs less than 12 lbs!\***

By expanding the existing meter circuit testing ability of the Bird Dog Plus, this new upgrade enables you to determine the accuracy of any meter in the field—from Form 1 through Form 17 with just one test! Electronic sensors allow you to automate the test to gain the highest possible accuracy. The process is fast, simple, and much less expensive than a portable test board for the meter test, and also tests your CTs and secondary circuits at the same time.

- Meter verification accuracy better than 0.2% direct connect
- All probes and sensors pre-connected—no need to connect or disconnect probes
- Live 3 phase vector plot on the screen of the Bird Dog Plus
- Save .pdf files & e-mail reports direct from SpinGraph
- 3 Small I Probes—0.75" Inside Diameter—0.5 to 100 Amps
- 3 Large I Probes—2" Inside Diameter—10 to 1000 Amps
- 3 Duckbill Connectors for direct connection to your meter circuit
- Tests residential meters
- Perform a **single** meter verification test on all self-contained meters
- You can also perform a **single** meter verification test on **all** CT rated meters
- Demand Test for kWh, kVARh, & kVAh--From 1 to 60 minutes demand intervals
- Lithium ion battery for longer life
- Weighs less than 12 pounds without probes\*
- Lifetime product support at no additional charge!
- Option: 1500 High Voltage Kit for testing primary CT's and overhead installations

Per ANSI C-12.1-2008  
using Method 3 (5.1.5.3)



YOUR 5000 BIRD DOG PLUS + THE UPGRADE = 6000 BIRD DOG PLUS

**Spinlab Utility Instrumentation, Inc.**

3110 Henson Road, Suite A1, Knoxville, TN 37921

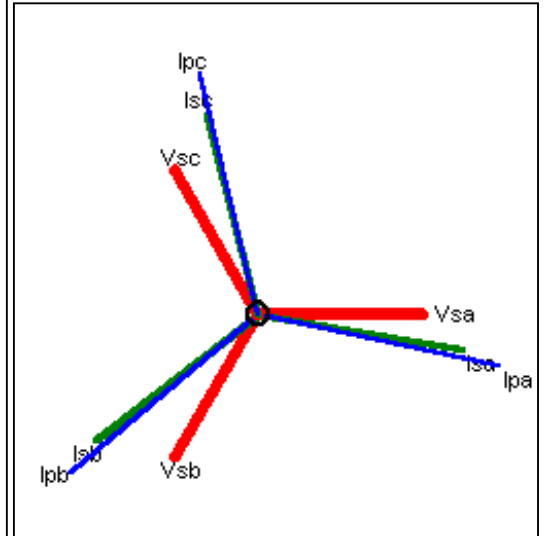
Telephone: 865.212.9881 Fax: 865.212.9886 e-mail: [sales@spinlabinc.com](mailto:sales@spinlabinc.com)

# System (Meter & Meter Circuit) River Bend Test Site

**Location:** CB5720      **Meter Type:** Form 9, 4 Wire Wye (3S-3IC)  
**Date:** 12/02/2008      **Rotation:** ABC  
**Comment:**      **Screen:** Composite

Phase	A	B	C	System
<b>Time</b>	08:37:30	08:37:30	08:37:30	
<b>General</b>				
<b>Vs</b>	120.9	119.9	119.6	
<b>Is</b>	1.526	1.596	1.486	
<b>Ip</b>	60.61	62.71	58.97	
$\phi$ Vs-Is	9.9	22.2	15.8	
$\phi$ Ip-Is	357.9	2.6	359.4	
$\phi$ Vsan-Is	9.9	142.2	255.8	
$\phi$ Vsan-Is	13.0	139.6	256.4	
<b>Harmonics</b>				
<b>THD Voltage %</b>	2.2	2.2	2.3	
<b>THD Current %</b>	7.3	6.6	2.6	
<b>Power</b>				
<b>kW</b>	0.18021	0.17976	0.16963	0.52961
<b>kVAR</b>	0.03951	0.06560	0.05306	0.15817
<b>kVA</b>	0.18449	0.19136	0.17774	0.55272
<b>TPF</b>	0.977 lg	0.939 lg	0.954 lg	0.958 lg
<b>DPF</b>	0.985 lg	0.926 lg	0.962 lg	0.961 lg
<b>Meter Verification</b>				
<b>Bird Dog (kWh)</b>				0.0036025
<b>Meter (kWh)</b>				0.0036000
<b>Time (Seconds)</b>				46.71
<b>P/R Setting</b>				2
<b>kH</b>				1.8
<b>Pulses per Rev</b>				12
<b>kVAh</b>				0.0036048
<b>Sensor Type</b>				IR Sensor
<b>% Accuracy</b>				99.9%
<b>Favors</b>				Customer
<b>Meter Circuit</b>				
<b>Ratio No Burden</b>	201.5	203.5	201.6	
<b>Rated Burden</b>	1.0	1.0	1.0	
<b>Burden Results</b>	As Rated	As Rated	As Rated	
<b>% Accuracy</b>	99.2	98.2	99.2	98.9%
<b>Favors</b>	Customer	Customer	Customer	Customer
<b>System Error (Meter and Meter Circuit Combined)</b>				
<b>% Accuracy</b>	99.1	98.3	99.1	98.8%
<b>Favors</b>	Customer	Customer	Customer	Customer
<b>Utility Gain/Loss</b>				(\$1,440.00) per 12 Months

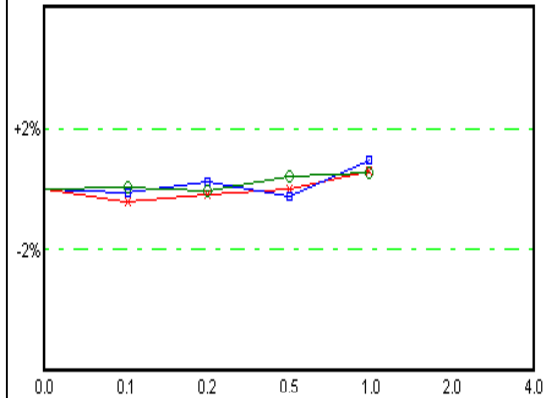
Vector Plot



Ratio/Burden Graph

A — x    B — □    C — ○

Ratio 200:5



Accuracy Summary

