

Technical Specifications

DIRECT INPUTS

AC Current: 3 Inputs, 0 to 20A or 0 to 50A (model dependent)
1 μ A Resolution
AC Voltage: 4 Inputs, 30 to 600V
1 μ V Resolution
Aux. Power: 1 Input, 100 to 530VAC

PROBE INPUTS

Two sets of three inputs
Resolution and range determined by probe

MEASUREMENTS

Energy: Wh, VARh, VAh
 $\pm 0.02\%$ Accuracy
Power: Watt, VAR, VA
 $\pm 0.02\%$ Accuracy
Power Factor: -1.00 to 1.00
Harmonics: Up to 100th harmonic (user selectable)

CURRENT SOURCE

Current Output: 0.1A to 20A (7302, 7332)
0.1A to 50A (7305, 7335)
Phase Adjustment: 0 to 360 degrees

VOLTAGE SOURCE

Voltage Output: 30V to 480V (7332, 7335)
30V to 600V (available upon request)
Phase Adjustment: 0 to 360 degrees

SYSTEM CONNECTIVITY

Pulse Inputs: 3(meter pulse input, standard input, aux input)
Pulse Outputs: 2(standard output, sync output)
USB to PC Port: 1(connectivity to PC)
USB Ports: 4(peripheral devices and barcode reader)
Ethernet Port: 1(high speed connectivity including internet)
RS232 Port: 1(legacy devices)
SD Memory Port: 1(removable SD Memory support)
Audio Port: 1(microphone, headphones)

OTHER

Display Resolution: 640 x 480, full color transfective VGA
Display Size: 8.4 inches
Operating Temperature: -20° C to 50° C (-4° F to 122° F)
Storage Temperature: -30° C to 60° C (-22° F to 140° F)
Humidity: 0 to 95% non-condensing
Internal Battery: 14V NiMH rechargeable
Dimensions: 21 in x 17 in x 8.5 in
Weight: Not including cables
7300 29.4lbs (13.3kg) 7302 35.6lbs (16.1kg)
7305 38.4lbs (17.4kg) 7332 42.2lbs (19.1kg)
7335 45.0lbs (20.4kg)
Warranty: 5 Years

All information subject to change.



Model Number Selector

- | | |
|-------------|--|
| 7300 | 3 Phase Reference Standard (0.02%)
Harmonic Analysis up to 100th
Wiring Verification
Customer Load Meter Testing
Demand Meter Testing
3 Phase Simultaneous CT Testing
3 Phase Simultaneous PT Testing
Transducer Testing
CT Demagnetization
Meter Site Manager Software |
| 7302 | + 3 Phase 20Amp Current Source |
| 7305 | + 3 Phase 50Amp Current Source |
| 7332 | + 3 Phase 20Amp Current Source
+ 3 Phase 480Volt Voltage Source |
| 7335 | + 3 Phase 50Amp Current Source
+ 3 Phase 480Volt Voltage Source |

Upgradeable

7 Series PowerMaster®

True Three Phase Analyzing Reference Standard with Internal Three Phase Current and Voltage Source



- **Protect Your Revenue**
 - **Reduce Testing Time**
 - **Test the Entire Meter Installation**
 - **Built-In Error Detection**
- **5 Year Warranty**
 - **Upgradeable Models**
 - **Lightweight and Compact**
 - **Easy to Use**

Powermetrix is pleased to introduce the most innovative field testing device in the electric utility industry. The PowerMaster® is a top of the line field instrument with a true 3-phase analyzing reference standard with optional integrated current and voltage sources. With an accuracy of $\pm 0.02\%$ in the field, the PowerMaster® 7 Series is more accurate than most lab standards, and 10 times more accurate than most meters. With the ability to measure all primary and secondary signals, the PowerMaster® can test all 3 phases for CT burden and ratio errors. It tests meters under customer load and/or generated load conditions. With many advanced features, the PowerMaster® is revolutionizing field testing!

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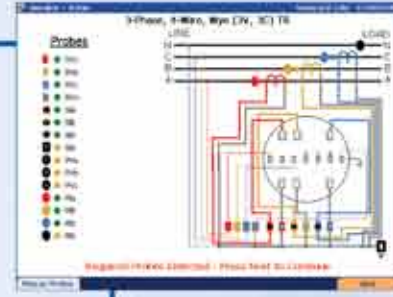
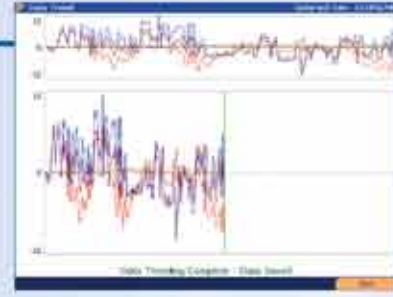
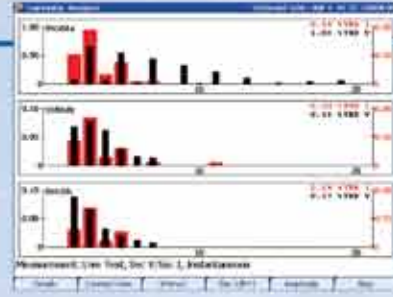
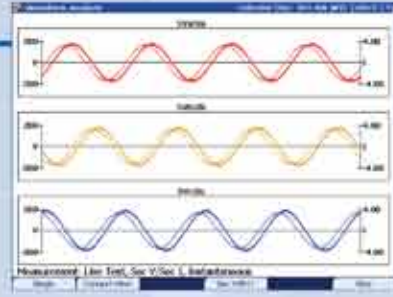
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Creating Better Field Testing Solutions



7 Series PowerMaster®

The Most Innovative Field Testing Device...EVER!

Actual
PowerMaster
Screens



Wiring Verification and Site Diagnostics

Customer Load Meter Test
Wh Test

% Registration 100.043

Test Info		Sys Info	
Time(sec)	20.542	Wh	5.3977
Time Left	0.000	VAh	5.3980
Pulses Exp	2.9987	VARh	-0.0536
Meter PF	3.0000	V	118.622
	0.9999	I	2.6614

Meter Testing

Customer Load
and
Generated Load

FL 100.008

Phase	Voltage	Current	PF	Time	Pulses
A1	119.24	5.001	1.000	36.21	10

PF 100.038

Phase	Voltage	Current	PF	Time	Pulses
A1	119.24	5.001	0.999	72.53	10

LL 100.017

Phase	Voltage	Current	PF	Time	Pulses
A1	119.25	0.302	1.000	360.52	10

Demand Test Results

Est. Time Remaining in Interval	Est. Time Remaining in Interval
0:00	0:00

Start Time	End Time	Voltage	Current	PF	Wh	VAh	VARh	Temp
12:00:00	12:00:00	119.24	5.001	1.000	36.21	10.00	0.00	20.00



Completely Database Driven

Other Features

- 4 USB Ports
- SD Memory Card Slot
- Aux. Power up to 530VAC
- Full Color Transflective Display
- Automatic Calibration Verification

Select Site

Site ID	Wiring Map
Service Type	Test Method
Options	Test Date
Account No.	City
Address 1	State/Prov
Address 2	Country
Telephone	Latitude
Site 1	Site 2
Notes	General
Created Date	Created By
Modified Date	Modified By

CT Test Setup

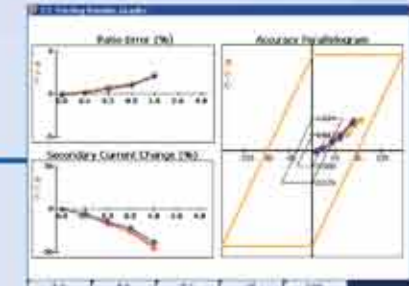
Service Type	3 Phase, 4 Wire, Wye (2W, 3C) TR
CT Mode	Wye or Delta
CT Double Wrap	<input type="checkbox"/>
Maximum Burden	0.5
Transformer Specs for Phase A	
Manufacturer	ABB
Model	CT-11
Catalog #	7852A76G10
Serial No	123456
Rating Factor	2
Accuracy Class	0.5
Burden Class	0.3
Nameplate Ratio	100 : 5

Test Results

CT A1	Ratio	100.00	Phase Angle	0.00
CT A2	Ratio	100.00	Phase Angle	0.00
CT A3	Ratio	100.00	Phase Angle	0.00
CT A4	Ratio	100.00	Phase Angle	0.00
CT A5	Ratio	100.00	Phase Angle	0.00
CT A6	Ratio	100.00	Phase Angle	0.00

Test Setup

Test Method	Customer Load
Test Date	12/12/2012
Test Time	12:00:00
Test Location	1234 Main St
Test Operator	John Doe
Test Status	Complete



CT Testing

Customer Load
and
Generated Load

CT Test Setup

Service Type	3 Phase, 4 Wire, Wye (2W, 3C) TR
CT Mode	Wye or Delta
CT Double Wrap	<input type="checkbox"/>
Maximum Burden	0.5
Transformer Specs for Phase A	
Manufacturer	ABB
Model	CT-11
Catalog #	7852A76G10
Serial No	123456
Rating Factor	2
Accuracy Class	0.5
Burden Class	0.3
Nameplate Ratio	100 : 5

Measured Ratio: 99.98	PASS
Ratio Error (%): -0.02	Primary Angle: 0.00
Phase Error (Degrees): 0.000	Secondary Angle: 0.00
Phase Error (Degrees): 0.000	Phase Error (Degrees): 0.00

Measured Ratio: 100.08	PASS
Ratio Error (%): 0.08	Primary Angle: 0.00
Phase Error (Degrees): 0.000	Secondary Angle: 0.00
Phase Error (Degrees): 0.000	Phase Error (Degrees): 0.00

Measured Ratio: 99.88	PASS
Ratio Error (%): -0.12	Primary Angle: 0.00
Phase Error (Degrees): 0.000	Secondary Angle: 0.00
Phase Error (Degrees): 0.000	Phase Error (Degrees): 0.00

Other Features

- PT Testing
- Demand Testing
- Transducer Testing
- CT Demagnetization
- Meter Site Manager Software