



# REPORT

For

## Schneider Electric

2195 Keating Cross Road  
Saanichton, British Columbia  
V8M 2A5, Canada

Date: December 09, 2014  
Report No.: 12428A-1E  
Revision No.: 0  
Project No.: 12428A  
Equipment: Digital Power Meter  
Model No.: ION 7550

ONE STOP GLOBAL CERTIFICATION SOLUTIONS



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Prepared by: LabTest Certification Inc.  
Date Issued: December 09, 2014  
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### TEST REPORT

#### IEC 61000-4-2, IEC 61000-4-3, IEC 61000-4-4, IEC 61000-4-5, IEC 61000-4-6 & IEC 61000-4-12

Report reference No..... :	12428A-1E		
Report Revision History:	✓ Rev. 0: December 09, 2014		
Tested by (printed name and signature) .....	Jeremy LEE		
Approved by (printed name and signature) .....	Kavinder Dhillon, Eng.L.		
Date of issue .....	December 09, 2014		
<p><b>Note:</b> By signing this report, both the Testing Technician and the Reviewer hereby declare to abide by the applicable LabTest policies:</p> <p>1.) Statement of Independence # 3014 (LabTest Employees),          2.) Independence, Impartiality, and Integrity #1039, clause 11 (Engineering Service Subcontractors), or          3.) Independence, Impartiality, and Integrity #1019, clause 3.5 (Testing Subcontractors).</p>			
Testing Laboratory Name .....	LabTest Certification Inc.		
Address .....	3133 – 20800 Westminster Hwy, Richmond, B.C. V6V-2W3		
Test Location Name .....	Same as Test Laboratory		
Address .....	Same as Test Laboratory		
Applicant's Name .....	Schneider Electric		
Address .....	2195 Keating Cross Road, Saanichton, B.C. V8M 2A5, Canada		
Type of Test			
Standards Immunity .....	<ul style="list-style-type: none"> <li>➤ IEC 61000-4-2:2008</li> <li>➤ IEC 61000-4-3:2006</li> <li>➤ IEC 61000-4-4:2004</li> <li>➤ IEC 61000-4-5:2005</li> <li>➤ IEC 61000-4-6:2008</li> <li>➤ IEC 61000-4-12:2006</li> </ul>		
Test item description .....	EMC		
Trademark .....	None		
Manufacturer .....	Same as Applicant		
Model and/or type reference .....	ION 7550		
Serial numbers .....	PI-1411A751-05		
Rating(s).....	120VAC, 60Hz, Single Phase, <16A		

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<b>Particulars: test item vs. test requirements</b>	
Equipment mobility .....	No
Operating condition .....	-20 to 70 °C
Mass of equipment (kg).....	2.0
Dimension(Width X Depth X Height)	190.5mm X 177.8mm X 152.4 mm
<b>Test case verdicts</b>	
Test case does not apply to the test object :	N/A
Test item does meet the requirement .....	Pass
Test item does not meet the requirement .. :	Fail
<b>Testing</b>	
Date of receipt of test item .....	November 28, 2014
Date(s) of performance of test .....	November 28 to December 03, 2014
<p>General remarks</p> <p>The test result presented in this report relate only to the object(s) tested.            This report shall not be reproduced, except in full, without the written approval of the Issuing testing laboratory.            "(see Enclosure #)" refers to additional information appended to the report.            "(see appended table)" refers to a table appended to the report.</p> <p><input type="checkbox"/> Throughout this report a comma is used as the decimal separator.  <input checked="" type="checkbox"/> Throughout this report a period is used as the decimal separator.</p>	
<b>General product information:</b>	
<p>PowerLogic ION 7550 Digital Power Meter            Model: ION 7550            Function: Intelligent Metering and Control Device            Power: 85-240 VAC, 50/60 Hz</p> <p>Measures Electrical Power and Energy.            Measurements are displayed or available for reading by multiple communication media( ex. Serial, Ethernet, IR and etc.)            Monitors and controls digital and analog inputs.            Meter is a black "cube" with a front panel display.</p>	

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**List of ancillary and/or support equipment provided by the applicant**

Model No.	Description	Manufacturer	Approvals/Standards
ION 7650	Comparing Power Meter	Schneider	CE/FCC
Current Loads	Provides 1A Current	Schneider	N/A
COM128	RS485 to RS232 Converter	Schneider	CE
Laptop	Excercise EUT Comms during test	Dell	CE

**EUT Configuration as Tested**

Order Number: **M7650B1C0B5F1N0A**  
 - ION7650, With Ethernet/Serial COMM Card  
 - Also with Analog/Digital I/O Card, Model P760AE

Module Name	Revision
CPU Board	14000-0175-220
Comm Card	14000-0150-110A
IO Card	14000-0232-110B
Power Supply	14000-0174-110C
Display	14000-0177-230A
LCD Panel	EW51000BMW

**Description of Interface Cables for Testing**

Connected port	Cable Type	Cable length	Ferrite
Digital Outputs (Main Board)	4x2 Wire 2k Terminated	2 m	No
Digital Inputs (Main Board)	8x1 Wire + 1Wire(com) 1k Terminated	2 m	No
Digital Inputs (IO Card)	8x1 Wire + 1Wire(com) 1k Terminated	2 m	No
Power Cord	120V/60Hz	1.5m	No
Safety Ground Terminal	1 Wire, 16 Gauge Connected to Ground Plane	1m	No
V1, V2, V3,Vref	4x16 AWG, 120/230VAC Load	1m above plane 3m below plane	No
I1,I2,I3,I4	8x16 AWG, 1 A Load	1m above plane 3m below plane	No
Ethernet	Unshielded Ethernet to Laptop	1m above plane 5m below plane	No
RS232	Shielded RS232 Cable to Laptop	1m above plane 5m below plane	No
RS-485 (Comm Card)	Shielded To Com32 RS485 to RS232 Converter to Laptop	1m above plane 5m below plane	No

**ARRANGEMENT OF INTERFACE CABLES:** All the above equipment/interface cables were placed in worst case positions to maximize emission signals during emission test. (please reference photographs).

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**Grounding:** *Grounding was in accordance with the manufacturer's requirements and conditions for the intended use.*

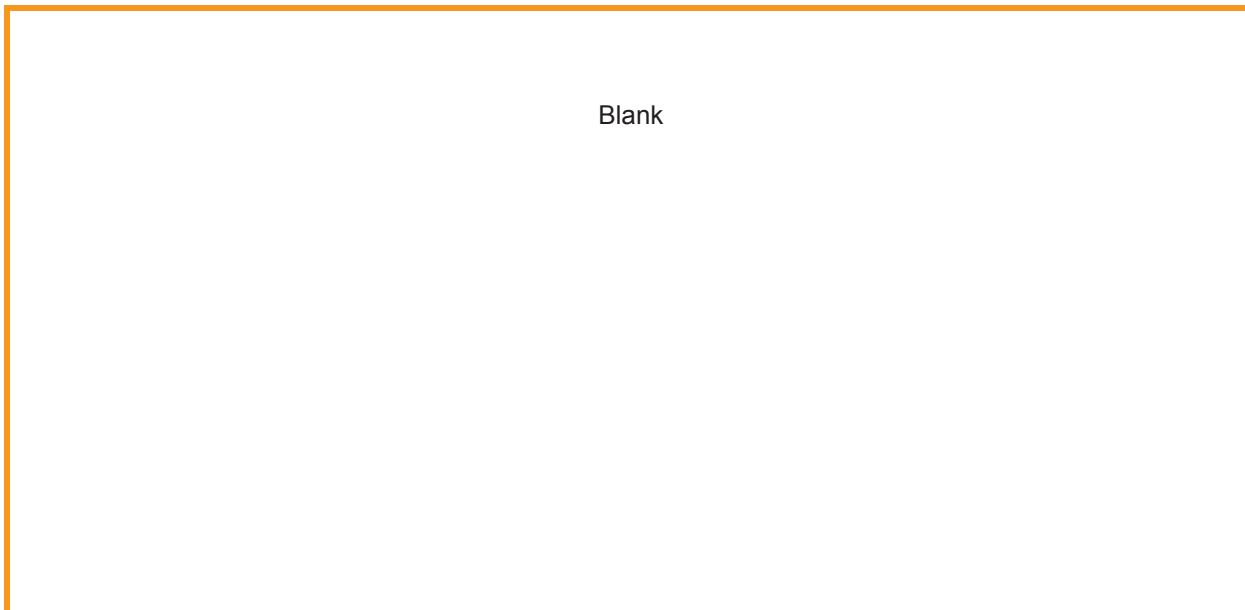
### Software and Firmware

Description	Version
PM8000 Meter Firmware	R2

### Modifications Required for Compliance

None.

### Markings



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## Test Summary

When configured and operated as specified in this report, the product was found to comply with the requirements as indicated below.

Test Standard	Test	Behavior	Comment
<b>Immunity, referenced by SN-62.46</b>			
Clause 7.8.1 and IEC 61000-4-2	Resistance to electrostatic discharge	N2	Pass
Clause 7.8.2 and IEC 61000-4-3	Immunity to RF electromagnetic fields	N2 <sup>1)</sup>	Pass
Clause 7.8.3 and IEC 61000-4-4	Test electrical fast transient burst	N2 <sup>1)</sup>	Pass
Clause 7.8.4 and IEC 61000-4-6	Test of immunity to conducted disturbances, induced by fields radio	N2 <sup>1)</sup>	Pass
Clause 7.8.5 and IEC 61000-4-5	Immunity test Surge	N1	Pass
Clause 7.8.6 and IEC 61000-4-12	Immunity test to damped oscillatory waves	N1 <sup>1)</sup>	Pass
Clause 7.11	Limited Functional Testing	N/A	Pass <sup>2)</sup>

### Behavior criteria

- N1 Normal behavior within the specification  
 Corresponding alarm indications and signaling  
 Stability of the display (I, U, W, X, Hz) Operating measures  
 Variation of the calibration within the uncertainty values of test
- N2 during the disturbance followed by an automatic recovery  
 all the features without loss of data.  
 One or more of the following behaviors may occur:
  - a) Fluctuation of display I operating measures (, U, W, X, Hz)
  - b) Loss of display
  - c) Exceeding threshold monitoring resulting in the appearance of an alarm
  - d) Loss of communication\
  - e) Reboot or freeze operation

Note1) the allowable limit of error variation of energy measures during this disturbance is 1.0% as shown in Table. 6 of IEC 62053-22.

Note2) this testing was occurred by Client at their sites. Please see Appendix A for the test results.