

- Issued by : NMI Certin B.V.  
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The Netherlands
- Applicant : Schneider Electric dba Power Measurement Ltd.  
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Canada
- Submitted : **A meter embedding IEC 61000-4-30 class A Power Quality functions**  
Manufacturer : Schneider Electric  
Type : PowerLogic ION7650
- Characteristics : See page 2 and further
- In accordance with : **IEC 61000-4-30 Ed. 3 (2015)**  
"Electromagnetic Compatibility (EMC) – Part 4-30: Testing and measurement techniques – Power quality measurement methods"  
**IEC 62586-2 Ed. 2 (2017)**  
"Power quality measurement in power supply systems - Part 2: Functional tests and uncertainty requirements"
- Measurement class : IEC 61000-4-30 class A and S

The undersigned declares that the described product is tested according to the above mentioned standard and meet their requirements, based on a non-recurrent examination. The appertaining test data is presented in type evaluation report number NMI-16200649-01b, NMI-16200649-02b and NMI-16200649-03b granted by NMI Certin B.V.

NMI Certin B.V.  
30 March 2017



C. Oosterman  
Head Certification Board

## IEC 61000-4-30 Power Quality functions tested

The following IEC 61000-4-30 measurement methods have been tested

**Table 1 IEC 61000-4-30 Power Quality functions tested**

IEC 62586-2 Clause	Parameter	IEC 61000-4-30 class	Comments
6.1 / 7.1	Power frequency	<b>A + S</b>	50 and 60 Hz
6.2 / 7.2	Magnitude of supply voltage	<b>A + S</b>	
6.3 / 7.3	Flicker	<b>A + S</b>	Class F1 230V, 50 Hz / 60 Hz 120V, 50 Hz / 60 Hz
6.4 / 7.4	Supply voltage interruptions, dips and swells	<b>A + S</b>	
6.5 / 7.5	Supply voltage unbalance	<b>A + S</b>	
6.6 / 7.6	Voltage harmonics	<b>A + S</b>	
6.7 / 7.7	Voltage interharmonics	<b>A + S</b>	
6.8 / 7.8	Mains signalling voltages on the voltage supply	<b>A + S</b>	Method 2
6.9 / 7.9	Measurement of underdeviation and overdeviation parameters	<b>A</b>	Not applicable for class S
6.10 / 7.10	Flagging	<b>A + S</b>	
6.11 / 7.11	Clock uncertainty testing	<b>A + S</b>	
6.12 / 7.12	Variation of external influence quantities	<b>A + S</b>	Temperature: 0°C .. +70°C Power supply: 85 – 240 VAC 110 – 300 VDC
6.13 / 7.13	Rapid Voltage Changes (RVC)	<b>A + S</b>	
6.14 / 7.14	Magnitude of current	<b>A + S</b>	
6.15 / 7.15	Harmonic current	<b>A + S</b>	
6.16 / 7.16	Interharmonic currents	<b>A + S</b>	
6.17 / 7.17	Current unbalance	<b>A + S</b>	
8	Calculation of measurement uncertainty and operating uncertainty	<b>A + S</b>	

A : compliance with class A  
S : compliance with class S  
--- : Not implemented

The tests are performed in accordance with IEC 62586-2 edition 2 (CDV).

## Characteristics of the measuring instrument

In Table 2 the general characteristics of the measuring instrument are presented.

**Table 2 General characteristics**

$U_{\text{din}}$	230 V <sub>LN</sub>
$U_{\text{max}}$	345 V <sub>LN</sub>
$I_{\text{nom}}$	1 A, 5 A or 10 A with external current clamps
$I_{\text{max}}$	10 A, 20 A and also 20 A with the external current clamps Testing is performed up to $I_{\text{nom}}$
$f_{\text{nom}}$	50 Hz and 60 Hz
Temperature	Rated range of operation: 0°C to +70°C
Power supply range	85 – 240 VAC (+/- 10%), 47-63 Hz 110 – 300 VDC (+/- 10%), 45 VA / 20 W
Software version	V410
Hardware version	Revision 5
Environmental application	Fixed (F), Indoor (I)