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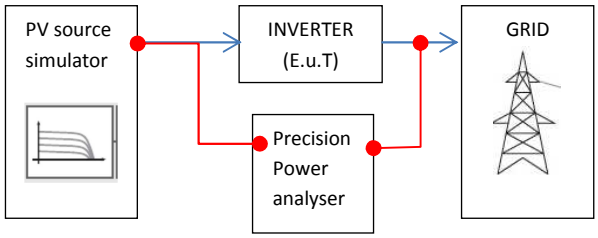
Applicant:	SIEL S.p.A.
Manufacturer:	**SIEL S.p.A.**
Equipment under Test:	Solar photovoltaic inverter
Type:	SOLEIL DSPX 500M TLH 380
Ratings:	Rated power = 500 kW AC side: 380 ±15% V; 50/60 Hz DC side: 560 ÷ 780 V_{DC} (MPPT DC voltage range)

TEST REPORT N° EPT.15.NRG.0136/53443

EN 50530:2010-04 + A1:2013- "Overall efficiency of grid connected photovoltaic inverters"

Scope: measurements of the efficiency of a grid connected solar photovoltaic inverter

Test set-up



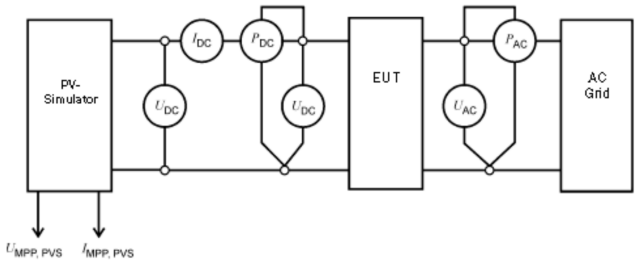


Fig. 1

Test procedure

The E.uT. has been connected to the test equipment according to set-up shown in Fig. 1. Measurement of the efficiency of DC to AC power conversion (η_{conv}) have been performed at the required levels of the PV simulator power. The ambient temperature during the test was in the range 25°C ± 5°C.

Test equipment

Type	Manufacturer	Mod.	s/n	Calbration date
4 channel (V,I) Precision power analyser	Yokogawa	WT1600	91G220764	27/05/2014
Current Transducer	Yokogawa	751552	105657 EBS	27/05/2014
Current Transducer	Yokogawa	751552	109556 ECS	27/05/2014
Current Transducer	Yokogawa	751552	105695 EBS	27/05/2014
Current Transducer	LEM	LT 2005-S	00-0420	27/05/2014

MEASUREMENT RESULTS

DC Power Steps [%Pn]	η_{conv}	Weigthing factor – a_{EU_i}
5	**93.40**	0.03
10	**96.92**	0.06
20	**98.39**	0.13
30	**98.91**	0.10
50	**99.17**	0.48
100	**99.17**	0.20

EVALUATION – CALCULATION of the power CONVERSION EFFICIENCY	**98.73**

Date:	18/05/2015	Signature:	
Test engineer	Giovanni Bellenda		