

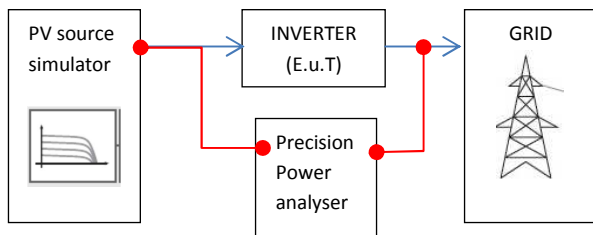
Applicant:	SIEL S.p.A.
Manufacturer:	<b>SIEL S.p.A.</b>
Equipment under Test:	Solar photovoltaic inverter
Type:	SOLEIL DSPX 330 TLH 380
Ratings:	Rated power = 330 kW AC side: 380 ±15% V; 50/60 Hz DC side: 560 ÷ 780 V <sub>DC</sub> (MPPT DC voltage range)

## TEST REPORT N° EPT.15.NRG.0151/53443

### 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



#### Test procedure

The E.u.T. 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 ( $\eta_{conv}$ ) 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	Calibration 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

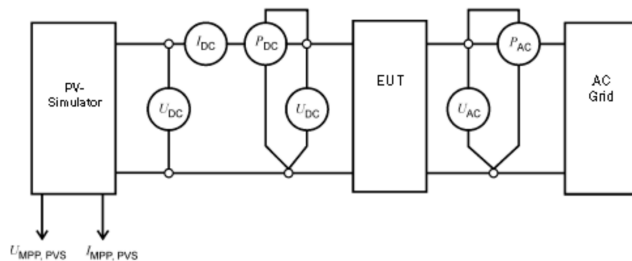



Fig. 1

#### MEASUREMENT RESULTS

DC Power Steps [%P <sub>n</sub> ]	$\eta_{conv}$	Weighing factor – $a_{EU\_i}$
5	<b>84.31</b>	0.03
10	<b>93.28</b>	0.06
20	<b>96.87</b>	0.13
30	<b>97.94</b>	0.10
50	<b>98.91</b>	0.48
100	<b>99.20</b>	0.20

#### EVALUATION – CALCULATION of the power CONVERSION EFFICIENCY

**97.83**

Date:	21/05/2015	Signature:	
Test engineer	Giovanni Bellenda		