

ISRAEL Accuracy and Insulation Tests Certification per IEC 62053-22 class 0.5S

 	<p>Israel Electric Corporation Marketing Division Central Metering Unit</p> <p>17 Ha-Lehi Street, Bnei Brak 51200, Israel Tel. 972 3 6174859 Fax 972 3 6174908</p> 																																						
<i>Test Certificate</i>																																							
Page 1 of 9	Date: 10/07/2007	Test Certificate No.: 167-2007																																					
According to procedure No. n/a		And/or according to requirement: 29-2007																																					
Date of acceptance: 25/06/2007		Description of tested item: Power Meter																																					
Manufacturer: SATEC		Type: PM130 PLUS																																					
Status: new		Serial No.: 72446, 72447																																					
Customer: SATEC Address: Har Ha-tzofim, Science Based Industrial Park, POBox 45022, Jerusalem 91450, Israel.																																							
Environmental conditions: Ambient temperature: $23^{\circ}\text{C} \pm 2^{\circ}\text{C}$; relative humidity: $50\% \pm 20\%$ Method: Comparison with reference standard Suggested next test date: n/a																																							
List of main equipment used for the calibration																																							
<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 25%;">Description/Type</th> <th style="width: 25%;">Manufacturer</th> <th style="width: 25%;">Serial number</th> <th style="width: 25%;">Test date</th> </tr> </thead> <tbody> <tr> <td>RMM 3000</td> <td>Zera</td> <td>7/5302</td> <td>3/2006</td> </tr> <tr> <td>MTS 320</td> <td>Zera</td> <td>7/5130</td> <td>6/2007</td> </tr> <tr> <td>9500</td> <td>F.W.Bell</td> <td>7/4342</td> <td>11/2004</td> </tr> <tr> <td>UNITEST</td> <td>BEHA</td> <td>K2251/19</td> <td>2/2007</td> </tr> <tr> <td>UH 28 M</td> <td>RB</td> <td>7/4009</td> <td>2/2004</td> </tr> <tr> <td>GP3050</td> <td>SCHLUMBERGER</td> <td>7/5098</td> <td>6/2007</td> </tr> <tr> <td>VCL 4034 MH</td> <td>VOTSCHE</td> <td>7/5282</td> <td>9/2006</td> </tr> <tr> <td>51-548-1</td> <td>ZERA</td> <td>7/3671</td> <td>11/2004</td> </tr> </tbody> </table>				Description/Type	Manufacturer	Serial number	Test date	RMM 3000	Zera	7/5302	3/2006	MTS 320	Zera	7/5130	6/2007	9500	F.W.Bell	7/4342	11/2004	UNITEST	BEHA	K2251/19	2/2007	UH 28 M	RB	7/4009	2/2004	GP3050	SCHLUMBERGER	7/5098	6/2007	VCL 4034 MH	VOTSCHE	7/5282	9/2006	51-548-1	ZERA	7/3671	11/2004
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<p><i>The reported expanded measurement uncertainties correspond to the coverage probability of approximately 95% and based on coverage factor $K=2$, or as stated in enclosed document. The results of calibration characterize the calibrated item at the time of calibration only, and not include any changes after this time.</i></p> <p><i>Reference should be made the full document. The document or part of it should not be copied without confirmation with the laboratory manager.</i></p> <p><i>This Calibration meets the requirements of ISO/IEC 17025 and reference quantities of the laboratory are traceable to national and international reference quantities.</i></p> <p><i>The use of ISRAC symbol relates to tests/calibrations which are included in the laboratory scope of accreditation, as detailed in the accreditation certificate.</i></p> <p><i>ILAC-ELECTRIC</i> <i>ISRAEL DIVISION-CENTRAL METERING</i> <i>TESTING LABORATORY</i> <i>DEPARTMENT</i> <i>STANDARDS LABORATORY</i></p> <p>Signature: <i>[Signature]</i> Date: 10/07/07 Tested by: G. Mitelman</p> <p>Signature: <i>[Signature]</i> Date: 12/17/07 Tested by: G. Mitelman</p> <p>Verified by: <i>[Signature]</i> בנ ציון רביבורי מינהל טכני במשרד הכלכלה מחלקה מודרניזציה וטchnology</p>																																							
Form No.: 06/307/00/03-23, version 3																																							

Test report of samples "Power Meter PM130 PLUS"

List of samples

Manufacturer	Type	Serial number	Reference voltage, V	Rated (maximum) current, A	Reference frequency, Hz
SATEC	PM130 PLUS	724446	230/400	3 x 5(10)	50
		724447			

List of performed tests

# item in IEC62053-22- class 0.5 s	# item in IEC6205 2-11	Test	Pass/No pass	# test
8.1	-	Error due to variation of the current	Pass	1.
8.2	-	Error due to ambient temperature variation	Pass	2.
8.2	-	Error due to voltage variation	Pass	3.
8.2	-	Error due to frequency variation	Pass	4.
8.2	-	Error due to reversed phase sequence	Pass	5.
8.2	-	Error due to voltage unbalance	Pass	6.
8.2.1	-	Error due to harmonic components in the current and voltage circuit	Pass	7.
8.2.2		Error due to sub-harmonics in the a.c. current circuit	Pass	8.
8.2.3	-	Error due to magnetic indication of external origin 0.5 mT	Pass	9.
8.3.1	-	Test of initial start-up of the meter	Pass	10.
7.4	7.3.3	AC voltage Insulation test	Pass	11.
7	7.3.2	Impulse voltage tests for circuits and between the circuits	Pass	12.

Expanded uncertainty of energy error: 200ppm at PF = 1 and 250ppm at PF = 0.5