

Institute of Metallurgy and Materials Science of Polish Academy of Sciences
30-059 Cracow, 25 Reymonta St., Poland
e-mail: kazimierz.drabczyk@wp.pl
www.imim.pl

**Inquiry ZO/09/Wolter/2016
Of 20.12.2016**

(involves: accredited measurements of PV modules)

I. PURCHASER

Institute of Metallurgy and Materials Science of Polish Academy of Sciences
30-059 Cracow, 25 Reymonta St., Poland
TIN: 6750001857, REGON No. (Business Registration Number): 000326374

II. DESCRIPTION OF THE SUBJECT ORDERS

1. The contract is for **accredited measurements of current-voltage characteristics and electrical parameters of photovoltaic modules** at Standard Test Conditions. Tenderer have to be accredited according to IEC 17025:2005 norm. Report from the measurements have to have appropriate announcement about the accreditation according to norm mentioned above and possess original markings confirming membership in **ILAC MRA**, EA or status of National Office of Measures.

2. A detailed description of the order)instrument parameters:

Measurement objects:

- 1 module with polycrystalline silicon solar cells. Approximate power of 250 W and dimensions 1x1.7 m,
- 1 module with monocrystalline silicon solar cells. Approximate power of 250 W and dimensions 1x1.7 m,

Measurements parameters:

Measurement conditions (STC)

- 1000 W/m²
- AM 1.5 global
- 25°C

Detailed electrical parameters:

- Short circuit current (I_{sc})
- Open circuit voltage (V_{oc})
- Maximum output (P_{mpp})
- Current at P_{mpp} (I_{mpp})
- Voltage at P_{mpp} (V_{mpp})
- Fill factor (FF)
- Efficiency (η)

Measurement tolerance

- The measurement tolerance for module output is +/- 1.8 % or better.

Additional measurement

- Electroluminescence imaging.
- Measurement of spectral response on module level in the range of 350 nm to 1100 nm

3. Additional requirements: the offer should include any other related costs such as the shipping costs, taxes etc. which contribute to the **total price of the product**.
4. Purchaser does not allow partial offers.
5. The Purchaser is not allowed to entrust all or part of the contract to subcontractors.

III. DEADLINE FOR COMPLETION OF CONTRACT

Deadline for completion of the order: up to three weeks since the deliver time.

IV. DESCRIPTION OF PREPERATION OF THE OFFER

The offer should:

- have a date of preparation,
- contain the address of a bidder resident, e-mail address, telephone number, tax identification number

V. DATE AND PLACE OF TENDER

1. The offer should be sent via: e-mail on the following address: **kazimierz.drabczy@wp.pl no later than 4.01.2017 till 14:00 am.**
2. Evaluation of offers will be conducted on 5.01.2017. The results will be announced and the best offer selected on 5.01.2016 at **the Purchaser office.**
3. Offers submitted after the deadline will not be considered.
4. The Tenderer may, before the submission deadline, change or withdraw his offer.
5. In the course of the study and evaluation of offers Purchaser may require of Tenderers explanations concerning the content of the tenders submitted.
6. Inquiry is given on: www.imim.pl and hung out on the Purchaser notice board .

VI. EVALUATION OF OFFERS

The Purchaser will evaluate the valid offers based on the following criteria:

Price - 100%

VII. INFORMATION ON CHOOSING THE BEST OFFER

About the selected best offer Purchaser shall notify Tenderer by e-mail address specified in the submitted offer.

VIII. ADDITIONAL INFORMATIONS

For more information contact Kazimierz Drabczyk on the following email address:
e-mail: kazimierz.drabczy@wp.pl