

**DRAFT**

**[TO BE PUBLISHED IN THE GAZETTE OF INDIA, EXTRAORDINARY, PART II,  
SECTION 3, SUB-SECTION(ii)]  
MINISTRY OF NEW AND RENEWABLE ENERGY  
GOVERNMENT OF INDIA  
ORDER**

New Delhi, the -----, 2024.

S.O.------(E).- In exercise of the powers conferred by sub-sections (1) and (2) of section 16 read with section 17 and sub-section (3) of section 25 of the Bureau of Indian Standards Act, 2016 (11 of 2016) and in supersession of the Solar Photovoltaics, Systems, Devices and Components Goods (Requirements for Compulsory Registration) Order, 2017, except as respects things done or omitted to be done before such supersession, the Central Government after consulting the Bureau of Indian Standards, is of the opinion that it is necessary or expedient so to do in the public interest, hereby makes the following Order, namely:-

2. Short title and commencement.- (1) This Order may be called the Solar Systems, Devices and Components Goods Order, 2024.

(2) It shall come into force on the expiry of one hundred and eighty days from the date of its publication in the Official Gazette.

3. Definitions.- (1) In this Order, unless the context otherwise requires –

(a) “Act” means the Bureau of Indian Standards Act, 2016 (11 of 2016);

(b) “appropriate authority” means any officer, not below the rank of Director or Scientist ‘E’ of the Ministry of New and Renewable Energy or its sub-ordinate or attached offices, authorised by the Secretary, Ministry of New and Renewable Energy, Government of India;

(2) Words and expressions used herein and not defined but defined in the Act and Regulations made thereunder, shall have the meanings respectively assigned to them in the Act and Regulations.

4. Conformity to the standard and compulsory use of standard mark.- Goods or article specified in column (2) of the Table below shall conform to the corresponding Indian Standard given in column (3) of the said Table and shall bear the ‘Standard Mark’ under a licence from the Bureau as per the Scheme-II of the Bureau of Indian Standards (Conformity Assessment) Regulations, 2018:

Provided that nothing in this Order shall apply to goods or article, as specified in column (2) of the said Table meant for export.

5. Certification and enforcement.- In respect of the goods or article specified in column (2) of the said Table, the Bureau shall be the certifying and enforcing authority. The market surveillance to ensure the conformity to Indian Standard for goods or article bearing Standard Mark mentioned in column (2) of the said Table shall be conducted by the Bureau or Agencies notified by the Bureau in consultation with the Ministry of New and Renewable Energy.

6. Concurrent running with the Solar Photovoltaics, Systems, Devices and Components Goods (Requirements for Compulsory Registration) Order, 2017.- This Order shall not affect the

validity of the licence of existing goods or article having valid licence as per the provisions of Solar Photovoltaics, Systems, Devices and Components Goods (Requirements for Compulsory Registration) Order, 2017 and the fresh registration or grant of licence to use standards mark and renewal of registration after expiry of their respective validity period shall be done under the provisions of this Order.

7. Penalty for contravention.- Any person who contravenes the provisions of this Order shall be punishable under the provisions of the said Act.

8. Power to issue directions.- The appropriate authority may issue directions to any person engaged in the manufacture, import, distribution, sale, hire, lease, storage, or exhibit for sale of the goods or articles to give information as deemed necessary, for carrying out the purposes of this Order.

9. Compliance of directions.- Every person to whom any direction is issued under this Order shall comply with such direction.

10. Grant of licence.-For the purpose of grant of licence under this Order, a condition is introduced to set minimum efficiency (@ Standard Test Conditions i.e., STC) criteria, i.e., efficiency (@STC) of 18% for Mono Crystalline Silicon Terrestrial Photovoltaic (PV) modules (Si wafer based) technology & Thin-Film Terrestrial Photovoltaic (PV) Modules [Cd Te, a-Si, Cu(In, Ga)(S, Se)<sub>2</sub>] technology and efficiency (@STC) of 17% for Poly Crystalline Silicon Terrestrial Photovoltaic (PV) modules (Si wafer based) technology. The efficiency (@ STC in %) of Solar PV module shall be calculated as “ratio of maximum PV output of the module to the Area of the front surface of a photovoltaic module as defined by its outer edges (in m<sup>2</sup>) and 1000 i.e.,  $Efficiency (@ STC \text{ in } \%) = [P_{max} \text{ (in Watt)}/1000 \times A \text{ (in m}^2)] \times 100.$ ” The maximum PV output and area of the module shall be referred as calculated in IS 14286 at STC.

**Table**

S. No.	Goods or articles	Indian Standard	Title of Indian Standard
(1)	(2)	(3)	(4)
1.	Crystalline Silicon Terrestrial Photovoltaic (PV) modules (Si wafer based)	IS 14286 (Part 1) : 2023/ IEC 61215-1 : 2021	Terrestrial Photovoltaic (PV) Modules - Design Qualification and Type Approval Part 1 Test Requirements
		IS 14286 (Part 1/Sec 1) : 2023/ IEC 61215-1-1: 2021	Terrestrial Photovoltaic (PV) Modules - Design Qualification and Type Approval: Part 1 Test Requirements: Sec 1 Special requirements for testing of crystalline silicon photovoltaic (PV) modules.
		IS/IEC 61730-1 : 2016	Photovoltaic (PV) Module Safety Qualification Part 1 Requirements for Construction
		IS/IEC 61730-2 : 2016	Photovoltaic (PV) Module Safety Qualification Part 2 Requirements for Testing

2.	Thin-Film Terrestrial Photovoltaic (PV) Modules [CdTe, a-Si, Cu(In,Ga)(S,Se) <sub>2</sub> ]	IS 14286 (Part 1) : 2023/ IEC 61215-1 : 2021	Terrestrial Photovoltaic (PV) modules - Design qualification and type approval: Part 1 test requirements.
		IS 14286 (Part 1/Sec 2) : 2023/ IEC 61215-1-2 : 2021 + Amd-1:2022	Terrestrial Photovoltaic (PV) Modules - Design Qualification and Type Approval Part 1 Test Requirements Section 2 Special requirements for testing of thin-film cadmium telluride (CdTe) based photovoltaic (PV) modules
		IS 14286 (Part 1/Sec 3) : 2023/ IEC 61215-1-3 : 2021 + Amd-1:2022	Terrestrial Photovoltaic (PV) Modules - Design Qualification and Type Approval Part 1 Test Requirements Section 3 Special requirements for testing of thin-film amorphous silicon based photovoltaic (PV) modules
		IS 14286 (Part 1/Sec 4) : 2023/ IEC 61215-1-4 : 2021 + Amd-1:2022	Terrestrial Photovoltaic (PV) Modules - Design Qualification and Type Approval Part 1 Test Requirements Section 4 Special requirements for testing of thin-film Cu(In,Ga)(S,Se) <sub>2</sub> based photovoltaic (PV) modules
		IS/IEC 61730-1 : 2016	Photovoltaic (PV) Module Safety Qualification Part 1 Requirements for Construction
		IS/IEC 61730-2 : 2016	Photovoltaic (PV) Module Safety Qualification Part 2 Requirements for Testing
3.	Storage Battery	IS 16270 : 2023	Secondary Cells and Batteries for Solar Photovoltaic Application — General Requirements and Methods of Test
4.	Power inverters for use in photovoltaic power system	IS 16221 (Part 2) : 2015/ IEC 62109-2 : 2011	Safety of Power Converters for Use in Photovoltaic Power Systems Part 2 Particular Requirements for Inverters
		IS/IEC 61683: 1999	Photovoltaic systems - Power conditioners - Procedure for measuring efficiency
5.	Utility-Interconnected Photovoltaic Inverters	IS 16221 (Part 2) : 2015/ IEC 62109-2 : 2011	Safety of Power Converters for Use in Photovoltaic Power Systems Part 2 Particular Requirements for Inverters
		IS 16169 : 2019/ IEC 62116 : 2014	Test Procedure of Islanding Prevention Measures for Utility-Interconnected Photovoltaic Inverters.
		IS 17980: 2022/IEC 62891:2020	Maximum Power Point Tracking Efficiency of Grid Connected Photovoltaic Inverters

Note: For the purpose of the Table, the latest version of Indian Standard including the amendments issued thereof and notified by the Bureau from time to time, shall apply from the date of such notification.

[File No.-313-12/5/2022-A AND QC]

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