F. No. 283/41/2024-GRID SOLAR

भारत सरकार / Government of India

नवीन और नवीकरणीय ऊर्जा मंत्रालय / Ministry of New & Renewable Energy

ग्रिड सौर ऊर्जा प्रभाग / Grid Solar Power Division

Atal Akshay Urja Bhawan,
Lodhi Road, New Delhi – 110003.
Dated: 1st March 2026

OFFICE MEMORANDUM

Sub: Updation of List I (Manufacturers and Models of Solar PV Modules) of ALMM Order, 2019 – Reg.

Ref: (i) MNRE's O.M. No. 283/54/2018-GRID SOLAR–Part(1) dated 10.03.2021
(ii) MNRE's O.M. No. 283/22/2023-GRID SOLAR/Pt dated 10.05.2023;
(iii) MNRE's O.M. No. 283/22/2023-GRID SOLAR/Pt dated 22.03.2024;
(iv) MNRE's O.M. No. 32/33/2024-SPV Division dated 06.05.2025;

Reference is invited to this Ministry's O.M.s of even no. dated 10.03.2021, regarding implementation of Approved Models and Manufacturers of Solar Photovoltaic Modules (Requirement for Compulsory Registration) Order, 2019 and publishing List – I (Manufacturers and Models of Solar PV Modules) of ALMM Order, 2019.

2. This Ministry vide its O.M.s referred at (ii), (iii) & (iv) above, inter-alia, directed that only such models of Solar PV Module Manufacturers will be enlisted under ALMM, which comply with the BIS Standards and are having the following minimum module efficiency:

Category	**Application/Use**	**Minimum Module Efficiency required to be eligible for enlistment in ALMM for solar PV modules**	
		For c-Si technology based solar PV modules	**For CdTe thin film technology based solar PV modules**
Category-I	Utility/Grid Scale Power Plants	20.00%	19.00%
Category-II	Rooftop and Solar Pumping	19.50%	18.50%
Category-III	Off-grid projects/applications like solar lamps, solar lights, solar street lights, solar fans, etc. (other than solar powered agricultural pumps and solar PV rooftops) requiring individual capacity of each solar PV module deployed, to be of less than 200 Watt peak	18.00%	18.00%
		(not to be included in main ALMM List-I but to be included in a separate ALMM list called ALMM List-I (DRE)	
Category-IV	Any other application	19.00%	18.00%

3. Post the aforesaid O.M. dated 10.05.2023 and subsequent O.M.s dated 22.03.2024 and 06.05.2025, only such models of Solar PV Modules have been considered for enlistment under ALMM List-I, whose module efficiency is meeting the eligibility criteria as mentioned in table at para-2 above.

4. The List – I (Manufacturers and Models of Solar PV Modules) of ALMM Order, 2019 was last updated on 07.02.2026.

5. The List – I (Manufacturers and Models of Solar PV Modules) of ALMM Order, 2019 is hereby further revised and the Revision-XLVII *(in the format of additions / modifications to Revision-XLVI)* is enclosed at Annexure-I. The last revision no. XLVI dated 07.02.2026 is at pages after Annexure-I.

6. The ALMM enlistment validity is subject to valid BIS Registration; else deemed to be delisted.

7. The details of Registration No. (R. No.) which has been allotted by BIS is mentioned against each manufacturer / manufacturing unit enlisted in ALMM and further details related to BIS certification like validity, models included, etc. may be checked from BIS website by using the following link:
https://www.crsbis.in/BIS/Lims_registrationc.do?hmode=getLimsData

8. This issues with the approval of competent authority.

(Sanjay G. Karndhar)
Scientist-E
E-mail: karndhar.sg@nic.in

Encl: as above

To: All Concerned
Copy to: Director (Technical), NIC, MNRE for uploading this document on MNRE's website

Annexure-I
Revision-XLVII

New additions on 01/03/2026 in the List of Manufacturers and Models of Solar PV Modules Enlisted under ALMM Order

S. No.	Name of the Manufacturer	Location of Manufacturing Facility	BIS Registration No.	Enlisted Capacity (MWs / Year)	S. No.	Type of Module	Applied Model	Enlisted Models	Module Efficiency (%)	No. of Cells in Module	System Voltage (in Volt)	Validity	
												From	To (subject to valid BIS Registration; else deeemd to be delisted)
1	M/s Startup Energy Private Limited (New Addition in ALMM)	SP1-1, STARTUP ENERGY PRIVATE LIMITED, TAPUKARA EXTN, INDUSTRIAL AREA, KAROLI, BHIWADI, KHAIRTHAL TIJARA, RAJASTHAN, 301707	R-84005800	1034	i	Bifacial N-Type TOPCon Module (Glass to Glass)	MMXG12R132N610 (610 Wp)	MMXG12R132N635	23.49	132 (Half Cut Cells)	1500	01.03.2026	28.02.2030
								MMXG12R132N630	23.30				
								MMXG12R132N625	23.12				
								MMXG12R132N620	22.93				
								MMXG12R132N615	22.75				
								MMXG12R132N610	22.56				
								MMXG12R132N605	22.38				
								MMXG12R132N600	22.19				
								MMXG12R132N595	22.01				
								MMXG12R132N590	21.82				
								MMXG12R132N585	21.64				
					ii	Bifacial N-Type TOPCon Module (Glass to Glass)	MMXG12R120N555 (555 Wp)	MMXG12R120N580	23.55	120 (Half Cut Cells)	1500		
								MMXG12R120N575	23.35				
								MMXG12R120N570	23.14				
								MMXG12R120N565	22.94				
								MMXG12R120N560	22.74				
								MMXG12R120N555	22.53				
								MMXG12R120N550	22.33				
								MMXG12R120N545	22.13				
								MMXG12R120N540	21.92				
								MMXG12R120N535	21.72				
								MMXG12R120N530	21.52				
					iii	Bifacial N-Type TOPCon Module (Glass to Glass)	MMXG12R120N525 (525 Wp)	MMXG12R120N525	21.32	120 (Half Cut Cells)	1500		
					iv	Bifacial N-Type TOPCon Module (Glass to Glass)	MMXG12R108N500 (500 Wp)	MMXG12R108N520	23.40	108 (Half Cut Cells)	1500		
								MMXG12R108N515	23.17				
								MMXG12R108N510	22.95				
								MMXG12R108N505	22.72				
								MMXG12R108N500	22.50				
								MMXG12R108N495	22.27				
								MMXG12R108N490	22.05				
								MMXG12R108N485	21.82				
								MMXG12R108N480	21.60				
								MMXG12R108N475	21.37				
					v	Bifacial N-Type TOPCon Module (Glass to Glass)	MMXG12R108N470 (470 Wp)	MMXG12R108N470	21.15	108 (Half Cut Cells)	1500		
2	M/s Insolation Green Energy Pvt. Ltd. Jaipur (Rajasthan) (Capacity Addition)	KHASRA NO. 4205/3454, 4207/3460, 3447-3452, 4383/3458, 3488-3498, 3500-3509, 3511, VILLAGE - SAWARDA, TEH - MAUZAMABAD, DUDU, RAJASTHAN,India-303348	R-84005622	4282	i	Bifacial N-Type TOPCon Module (Glass to Glass)	INA-156THC-GGF-625	INA-156THC-GGF-650	23.25	156 (Half Cut Cells)	1500	13.10.2025	12.10.2029
								INA-156THC-GGF-645	23.07				
								INA-156THC-GGF-640	22.90				
								INA-156THC-GGF-635	22.72				
								INA-156THC-GGF-630	22.54				
								INA-156THC-GGF-625	22.36				
								INA-156THC-GGF-620	22.18				
								INA-156THC-GGF-615	22.00				
								INA-156THC-GGF-610	21.82				
								INA-156THC-GGF-605	21.64				
					ii	Bifacial N-Type TOPCon Module (Glass to Glass)	INA-144THC-GGF-575	INA-144THC-GGF-600	23.23	144 (Half Cut Cells)	1500		
								INA-144THC-GGF-595	23.03				
								INA-144THC-GGF-590	22.84				
								INA-144THC-GGF-585	22.65				
								INA-144THC-GGF-580	22.45				
								INA-144THC-GGF-575	22.26				
								INA-144THC-GGF-570	22.07				

S. No.	Name of the Manufacturer	Location of Manufacturing Facility	BIS Registration No.	Enlisted Capacity (MWs / Year)	S. No.	Type of Module	Applied Model	Enlisted Models	Module Efficiency (%)	No. of Cells in Module	System Voltage (in Volt)	Validity	
												From	To (subject to valid BIS Registration; else deeemd to be delisted)
								INA-144THC-GGF-565	21.87				
								INA-144THC-GGF-560	21.68				
								INA-144THC-GGF-555	21.48				
								INA-144THC-GGF-550	21.29				
					iii	Bifacial N-Type TOPCon Module (Glass to Glass)	INA-132THC-GGF-525	INA-132THC-GGF-540	22.73	132 (Half Cut Cells)	1500		
								INA-132THC-GGF-535	22.52				
								INA-132THC-GGF-530	22.31				
								INA-132THC-GGF-525	22.10				
								INA-132THC-GGF-520	21.89				
								INA-132THC-GGF-500	21.05				
					iv	Bifacial N-Type TOPCon Module (Glass to Glass)	INA-120THC-GGF-500	INA-120THC-GGF-500	23.02	120 (Half Cut Cells)	1500		
					v	Bifacial N-Type TOPCon Module (Glass to Glass)	INA-108THC-GGF-450	INA-108THC-GGF-450	22.94	108 (Half Cut Cells)	1500		
					vi	Bifacial N-Type TOPCon Module (Glass to Glass)	INA132T210RGGF615	INA132T210RGGF635	23.51	132 (Half Cut Cells)	1500		
								INA132T210RGGF630	23.32				
								INA132T210RGGF625	23.14				
								INA132T210RGGF620	22.95				
								INA132T210RGGF615	22.77				
								INA132T210RGGF610	22.58				
								INA132T210RGGF605	22.40				
								INA132T210RGGF600	22.21				
3	**M/s Rajdeep Solar Energy Pvt. Limited** **(New Addition in ALMM)**	**Survey no. 432, Moti Chirai, Block 1, on National Highway, Bhachau-370140, Gujarat, Kachchh, Gujarat, India - 370140**	**R-72012270**	**194**	**i**	Bifacial Mono c-Si PERC Module (Glass to Transparent Backsheet)	RS10-M10-144-545 (545 Wp)	RS10-M10-144-555	21.48	144 (Half Cut Cells)	1500	01.03.2026	28.02.2030
								RS10-M10-144-550	21.29				
								RS10-M10-144-545	21.10				
								RS10-M10-144-540	20.90				
								RS10-M10-144-535	20.71				
								RS10-M10-144-530	20.52				
4	**M/s Swelect HHV Solar Photovoltaics Private Limited** **(Model Addition + Capacity Addition)**	**No. 169,166, Sembagoundan Pudur, Kuppeplayam Village, Coimbatore, Coimbatore North Taluk, Coimbatore District, Tamil Nadu -641107**	**R-61003433**	**853**	**i**	Bifacial N-Type TOPCon Module (Glass to Glass)	SWT35BG4595 (595 Wp)	SWT35BG4620	22.95	132 (Half Cut Cells)	1500	31.05.2023	30.05.2027
								SWT35BG4615	22.77				
								SWT35BG4610	22.58				
								SWT35BG4605	22.40				
								SWT35BG4600	22.21				
								SWT35BG4595	22.03				
								SWT35BG4590	21.84				
								SWT35BG4585	21.66				
								SWT35BG4580	21.47				
								SWT35BG4575	21.29				
								SWT35BG4570	21.10				
5	**M/s Vikram Solar Limited** **(New Addition in ALMM)**	**PLOT NO: B400, B300B, INDOSPACE INDUSTRIAL PARK, SIPCOT VALLAM VADAGAL, SRIPERUMBUDUR, BOODHANUR, KANCHEEPURAM, TAMIL NADU, INDIA, NA, TAMIL NADU, India - 602105**	**R-61006980**	**3358**	**i**	Bifacial N-Type TOPCon Module (Glass to Glass)	HYPERSOL VSMDH.66.630.05 (630 Wp)	HYPERSOL VSMDH.66.640.05	23.69	132 (Half Cut Cells)	1500	01.03.2026	28.02.2030
								HYPERSOL VSMDH.66.635.05	23.51				
								HYPERSOL VSMDH.66.630.05	23.32				
								HYPERSOL VSMDH.66.625.05	23.14				
								HYPERSOL VSMDH.66.620.05	22.95				
								HYPERSOL VSMDH.66.615.05	22.77				
								HYPERSOL VSMDH.66.610.05	22.58				
								HYPERSOL VSMDH.66.605.05	22.40				
								HYPERSOL VSMDH.66.600.05	22.21				
					ii	Bifacial N-Type TOPCon Module (Glass to Glass)	HYPERSOL VSMDH.60.570.05 (570 Wp)	HYPERSOL VSMDH.60.580.05	23.55	120 (Half Cut Cells)	1500		
								HYPERSOL VSMDH.60.575.05	23.35				
								HYPERSOL VSMDH.60.570.05	23.14				
								HYPERSOL VSMDH.60.565.05	22.94				
					iii	Bifacial N-Type TOPCon Module	HYPERSOL VSMDH.60.570.05 (570 Wp)	HYPERSOL VSMDH.54.520.05	23.40	108 (Half Cut Cells)	1500		
								HYPERSOL VSMDH.54.515.05	23.17				

S. No.	Name of the Manufacturer	Location of Manufacturing Facility	BIS Registration No.	Enlisted Capacity (MWs / Year)	S. No.	Type of Module	Applied Model	Enlisted Models	Module Efficiency (%)	No. of Cells in Module	System Voltage (in Volt)	Validity	
												From	To (subject to valid BIS Registration; else deeemd to be delisted)
						(Glass to Glass)		HYPERSOL VSMDH.54.510.05	22.95				
								HYPERSOL VSMDH.54.505.05	22.72				
								HYPERSOL VSMDH.54.500.05	22.50				
					iv	Bifacial N-Type TOPCon Module (Glass to Glass)	HYPERSOL VSMDH.48.440.05 (440 Wp)	HYPERSOL VSMDH.48.465.05	23.27	96 (Half Cut Cells)	1500		
								HYPERSOL VSMDH.48.460.05	23.02				
								HYPERSOL VSMDH.48.455.05	22.77				
								HYPERSOL VSMDH.48.450.05	22.52				
6	M/s NITHIN SAI RENEWABLES PRIVATE LIMITED (Model Addition + Capacity Addition)	PLOT NO 75-A, 2ND PHASE, KIADB-INDUSTRIAL AREA, CHINTAMANI TALUK, MASTENAHALLI INDUSTRIAL AREA, CHIKKABALLAPUR, KARNATAKA,India-563128	R-62005509	691	i	Bifacial N-Type TOPCon Module (Glass to Glass)	NS-N16-144HG-580 (580 Wp)	NS-N16-144HG-590	22.84	144 (Half Cut Cell)	1500	30.06.2025	29.06.2029
								NS-N16-144HG-585	22.65				
								NS-N16-144HG-580	22.45				
								NS-N16-144HG-575	22.26				
								NS-N16-144HG-570	22.07				
					ii	Bifacial N-Type TOPCon Module (Glass to Glass)	NS-N16-132HG-535 (535 Wp)	NS-N16-132HG-540	22.65	132 (Half Cut Cell)	1500		
								NS-N16-132HG-535	22.44				
								NS-N16-132HG-530	22.23				
								NS-N16-132HG-525	22.02				
					iii	Bifacial N-Type TOPCon Module (Glass to Glass)	NS-N16-120HG-480 (480 Wp)	NS-N16-120HG-490	22.54	120 (Half Cut Cell)	1500		
								NS-N16-120HG-485	22.31				
								NS-N16-120HG-480	22.08				
								NS-N16-120HG-475	21.85				
					iv	Bifacial N-Type TOPCon Module (Glass to Glass)	NS-N16-108HG-435 (435 Wp)	NS-N16-108HG-440	22.40	108 (Half Cut Cell)	1500		
								NS-N16-108HG-435	22.15				
								NS-N16-108HG-430	21.89				
					v	Bifacial N-Type TOPCon Module (Glass to Glass)	NS-N16-96HG-385 (385 Wp)	NS-N16-96HG-390	22.23	96 (Half Cut Cell)	1500		
								NS-N16-96HG-385	21.95				
								NS-N16-96HG-380	21.66				
					vi	Bifacial N-Type TOPCon Module (Glass to Glass)	NS-N16-84HG-340 (340 Wp)	NS-N16-84HG-340	22.03	84 (Half Cut Cell)	1500		
								NS-N16-84HG-335	21.71				
					vii	Bifacial N-Type TOPCon Module (Glass to Glass)	NS-N16-72HG-295 (295 Wp)	NS-N16-72HG-295	22.10	72 (Half Cut Cell)	1500		
								NS-N16-72HG-290	21.73				
								NS-N16-72HG-285	21.35				
					viii	Bifacial Mono c-Si PERC Module (Glass to Glass)	NS-P10-144HG-525 (525 Wp)	NS-P10-144HG-550	21.29	144 (Half Cut Cell)	1500		
								NS-P10-144HG-545	21.10				
								NS-P10-144HG-540	20.90				
								NS-P10-144HG-535	20.71				
								NS-P10-144HG-530	20.52				
								NS-P10-144HG-525	20.32				
								NS-P10-144HG-520	20.13				
								NS-P10-144HG-515	19.94				
								NS-P10-144HG-510	19.74				
								NS-P10-144HG-500	19.36				
					ix	Bifacial N-Type TOPCon Module (Glass to Glass)	NS-N16-132HG-630 (630 Wp)	NS-N16-132HG-635	23.51	132 (Half Cut Cell)	1500		
								NS-N16-132HG-630	23.32				
								NS-N16-132HG-625	23.14				
								NS-N16-132HG-620	22.95				
								NS-N16-132HG-615	22.77				
								NS-N16-132HG-610	22.58				
					x	Bifacial N-Type TOPCon Module (Glass to Glass)	NS-N16-120HG-565 (565 Wp)	NS-N16-120HG-575	23.28	120 (Half Cut Cell)	1500		
								NS-N16-120HG-570	23.08				
								NS-N16-120HG-565	22.88				
								NS-N16-120HG-560	22.67				
								NS-N16-120HG-555	22.47				
					xi	Bifacial N-Type TOPCon Module (Glass to Glass)	NS-N16-108HG-515 (515 Wp)	NS-N16-108HG-520	23.31	108 (Half Cut Cell)	1500		
								NS-N16-108HG-515	23.09				
								NS-N16-108HG-510	22.86				

S. No.	Name of the Manufacturer	Location of Manufacturing Facility	BIS Registration No.	Enlisted Capacity (MWs / Year)	S. No.	Type of Module	Applied Model	Enlisted Models	Module Efficiency (%)	No. of Cells in Module	System Voltage (in Volt)	Validity	
												From	To (subject to valid BIS Registration; else deeemd to be delisted)
								NS-N16-108HG-505	22.64				
								NS-N16-108HG-500	22.42				
					xii	Bifacial N-Type TOPCon Module (Glass to Glass)	NS-N16-96HG-455 (455 Wp)	NS-N16-96HG-460	23.11	96 (Half Cut Cell)	1500		
								NS-N16-96HG-455	22.86				
								NS-N16-96HG-450	22.61				
								NS-N16-96HG-445	22.36				
					xiii	Bifacial N-Type TOPCon Module (Glass to Glass)	NS-N16-84HG-400 (400 Wp)	NS-N16-84HG-405	23.13	84 (Half Cut Cell)	1500		
								NS-N16-84HG-400	22.85				
								NS-N16-84HG-395	22.56				
								NS-N16-84HG-390	22.27				
					xiv	Bifacial N-Type TOPCon Module (Glass to Glass)	NS-N16-72HG-340 (340 Wp)	NS-N16-72HG-345	22.84	72 (Half Cut Cell)	1500		
								NS-N16-72HG-340	22.51				
								NS-N16-72HG-335	22.18				
7	M/s ARMY SOLAR ENERGY PRIVATE LIMITED (New Addition in ALMM)	NEW BLOCK NO.119, MOLVAN KARANJ, MOLVAN PANETHA ROAD, SURAT, GUJARAT - 394110 India	R-72013790	622	i	Bifacial N-Type TOPCon Module (Glass to Glass	AS-144TG-590 (590 Wp)	AS-144TG-600	23.24	144 (Half Cut Cells)	1500	01.03.2026	28.02.2030
								AS-144TG-595	23.04				
								AS-144TG-590	22.85				
								AS-144TG-585	22.66				
								AS-144TG-580	22.43				
								AS-144TG-575	22.25				
								AS-144TG-570	22.07				
					ii	Bifacial N-Type TOPCon Module (Glass to Glass)	AS-144TG-555 (555 Wp)	AS-144TG-565	21.88	144 (Half Cut Cells)	1500		
								AS-144TG-560	21.70				
								AS-144TG-555	21.49				
								AS-144TG-550	21.31				
								AS-144TG-545	21.11				
								AS-144TG-540	20.92				
					iii	Bifacial N-Type TOPCon Module (Glass to Glass)	AS-132TG-510 (510 Wp)	AS-132TG-535	22.57	132 (Half Cut Cells)	1500		
								AS-132TG-530	22.35				
								AS-132TG-525	22.12				
								AS-132TG-520	21.93				
								AS-132TG-515	21.70				
								AS-132TG-510	21.52				
								AS-132TG-505	21.31				
								AS-132TG-500	21.08				
								AS-132TG-495	20.87				
								AS-132TG-490	20.66				
					iv	Bifacial N-Type TOPCon Module (Glass to Glass)	AS-120TG-465 (465 Wp)	AS-120TG-485	22.43	120 (Half Cut Cells)	1500		
								AS-120TG-480	22.18				
								AS-120TG-475	21.98				
								AS-120TG-470	21.72				
								AS-120TG-465	21.50				
								AS-120TG-460	21.27				
								AS-120TG-450	20.81				
								AS-120TG-445	20.56				
								AS-120TG-440	20.32				
8	M/s. Solex Energy Limited (Capacity Addition)	Plot No 1A, Block 938, Tadkeshwar, Kim Mandvi Road, Mandvi, Surat - 394110, Gujarat	R-72008125	3782	i	Bifacial N- type Topcon Module (Glass to Glass)	STGP132R210B16-600 (600 Wp)	STGP132R210B16-625	23.14	132 (Half Cut Cells)	1500	01.09.2023	31.08.2027
								STGP132R210B16-620	22.95				
								STGP132R210B16-615	22.77				
								STGP132R210B16-610	22.58				
								STGP132R210B16-605	22.40				
								STGP132R210B16-600	22.21				
								STGP132R210B16-595	22.03				
								STGP132R210B16-590	21.84				
								STGP132R210B16-585	21.66				
								STGP132R210B16-580	21.47				
								STGP132R210B16-575	21.29				