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: 13th October 2025

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		18.00%			
	PV rooftops) requiring individual capacity of each solar PV module deployed, to be of less than 200 Watt peak	(not to be included in ma a separate ALMM	ain ALMM List-I but to be included in 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.
- The List I (Manufacturers and Models of Solar PV Modules) of ALMM Order, 2019 was last updated on 19.09.2025.
- 5. The List I (Manufacturers and Models of Solar PV Modules) of ALMM Order, 2019 is hereby further revised and the Revision-XLIII (in the format of additions / modifications to Revision-XLII) is enclosed at Annexure-I. The last revision no. XLII dated 19.09.2025 is at pages after Annexure-I.
- 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

S. No.	Name of the Manufacturer	Location of Manufacturing Facility	BIS Registration	Enlisted Capacity	S. No.	Type of Module	Applied Model	Enlisted Models	Module Efficiency	No. of Cells in Module	System Voltage		alidity	
			No.	(MWs / Year)					(%)		(in Volt)		To (subject to valid BIS Registration; else deeemd to be delisted)	
8	M/s. Insolation Green	Khasra No. 4205/3454,	R-84005622	1202	i	Bifacial N-Type	INA-156THC-GGF-625	INA-156THC-GGF-650	23.25	156 (Half Cut Cells)	1500	13.10.2025	12.10.2029	
	Energy Private Limited	4207/3460, 3447-3452,				TOPCon	(625 Wp)	INA-156THC-GGF-645	23.07	1				
		4383/3458, 3488 -3498,3500				Module		INA-156THC-GGF-640	22.90					
	(New Addition in ALMM)	-3509, 3511, Village -				(Glass to Glass)		INA-156THC-GGF-635	22.72					
	Ţ.	Sawarda Teh -						INA-156THC-GGF-630	22.54					
		Mauzamabad - 303348,						INA-156THC-GGF-625	22.36					
		Dudu, Rajasthan,India						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 i	Bifacial N-Type	INA-144THC-GGF-575	INA-144THC-GGF-600		144 (Half Cut Cells)	1500	00		
						TOPCon Module (Glass to Glass)	(575 Wp)	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]				
							-	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	INA-132THC-GGF-525	INA-132THC-GGF-540	22.73	132 (Half Cut Cells)	1500			
				1			TOPCon	(525 Wp)	INA-132THC-GGF-535	22.52				
						Module		INA-132THC-GGF-530	22.31					
						(Glass to Glass)	L	INA-132THC-GGF-525	22.10					
				ı			L	INA-132THC-GGF-520	21.89]				
								INA-132THC-GGF-500	21.05			j		
					iv	Bifacial N-Type TOPCon Module (Glass to Glass)	INA-120THC-GGF-500 (500 Wp)	INA-120THC-GGF-500	23.02	120 (Half Cut Cells)	1500			
					V	Bifacial N-Type TOPCon Module (Glass to Glass)	INA-108THC-GGF-450 (450 Wp)	INA-108THC-GGF-450	22.94	108 (Half Cut Cells)	1500			

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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: 21st May 2025

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						
į		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	18.00%	18.00%					
	capacity of each solar PV module deployed, to be of less than 200 Watt peak	(not to be included in main ALMM List-I but be included in a separate ALMM list calls 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.
- The List I (Manufacturers and Models of Solar PV Modules) of ALMM Order, 2019 was last updated on 21.04.2025.
- 5. The List I (Manufacturers and Models of Solar PV Modules) of ALMM Order, 2019 is hereby further revised and the Revision-XXXVIII (in the format of additions / modifications to Revision-XXXVII) is enclosed at Annexure-I. The last revision no. XXXVII dated 21.04.2025 along with provisional enlistments therein (excluding those which have been removed on account of inclusion in main ALMM List-I) 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.ln/BIS/Lims_registrationc.do?hmode=getLimsData

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

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March September March Sept	ation; else deeemd to	Validity (Registratio	System Voltage (in Volt)	No. of Cells in Module	Module Efficiency (%)	Enlisted Models	Applied Model	Type of Module	S. No.	Enlisted Capacity (MWs / Year)	BIS Registration No.	Location of Manufacturing Facility	Name of the Manufacturer	S. No.								
1	delisted)	From																				
Married Control Married Co										637	R-84003549	Khasra No 11/1, 1136/9,	M/s. Insolation	5								
Compared C																						
)					INA-144THC-WF-560					302001, Rajasthan, India										
### ### ### ### ### ### ### ### ### ##			1500	144 (Half Cut Cells)				N-Type TOPCon Module	i													
The Part William Wil						INA-144THC-WF-555																
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Mail: 108THC-TF-430					22.68	INA-108THC-TF-445																
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International Content			1500	108 (Half Cut Cells)					viii													
MA-108THC-TH-420 21.41 MA-108THC-TH-421 22.15 MA-108THC-TH-421 22.15 MA-108THC-TH-421 22.15 MA-108THC-TH-421 22.15 MA-108THC-GGF-GG 22.54 MA-108THC-GGF-GG 22.54 MA-108THC-GGF-GG 22.16 MA-108THC-GGF-GG 22.18 MA-108THC-GGF-GG 22.16 MA-108THC-GGF-SG 22.16 MA-108THC-GGF-			2000	200 (11011 001 00110)			(430 Wp)															
MA.18FHC.FG-430 29.90 MA.18FHC.FG-630 22.94 MA.18FHC.GG-630 22.94 MA.18FHC.GG-630 22.94 MA.18FHC.GG-630 22.94 MA.18FHC.GG-630 22.94 MA.18FHC.GG-630 22.94 MA.18FHC.GG-640 MA.18FHC.GG-660 MA.18FHC					21.41	INA-108THC-TF-420		Backsneet)														
NA.158TH.CGGF-635 22.54 NA.158TH.CGGF-635 22.36 NA.158TH.CGGF-635 22.36 NA.158TH.CGGF-635 22.36 NA.158TH.CGGF-635 22.30 NA.158TH.CGGF-635 22.30 NA.158TH.CGGF-635 22.30 NA.158TH.CGGF-635 22.30 NA.158TH.CGGF-630 22.36 NA.158TH.CGGF-630 NA.158TH.CGGF-630 NA.158TH.CGGF-630 NA.158TH.CGGF-630 NA.158TH.CGGF-630 NA.158TH.CGGF-630 NA.158TH.CGGF-635 NA.158TH.CGGF-735 NA.158TH.CGG																						
Bifacial N-Type TOPCon Module (Glass to Glass) MA-156THC-GGF-610 MA-156THC-GGF-6		4						+					i	1		ļ						
Bifacial N-Type TOPCon Module (Glass to Glass) MA 156THC-GGF-620 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 1																						
Module (Glass to Glass) MA-150TH-CGGF-610 21.82 156 (Half Cut Cells) 1500					22.18	INA-156THC-GGF-620		[
Columbia			1500	156 (Half Cut C-II-)			INA-156THC-GGF-610		1.,			1										
INA-15FITIC-GGF-509 21.46 INA-15FITIC-GGF-599 21.29 INA-15FITIC-GGF-599 21.11 INA-15FITIC-GGF-590 21.11 INA-15FITIC-GGF-590 21.11 INA-15FITIC-GGF-590 21.11 INA-15FITIC-GGF-590 22.45 INA-14TIC-GGF-590 22.45 INA-14TIC-GGF-590 INA-14TIC-GGF-590 22.45 INA-14TIC-GGF-590 22.07 INA-14TIC-GGF-590 INA-14TIC-GGF-590 22.07 INA-14TIC-GGF-590 21.68 INA-14TIC-GGF-590 21.68 INA-14TIC-GGF-590 21.69 INA-12TIC-GGF-590 22.21 INA-12TIC-GGF-490 INA-12TIC-GGF-			1300	250 (rian cut cens)			(610 Wp)		l ix													
NA_156TH-C-GGF-590 21.11 NA_156TH-C-GGF-590 22.25 NA_144TH-C-GGF-590 22.26 NA_144TH-C-GGF-575 22.26 NA_144TH-C-GGF-575 22.26 NA_144TH-C-GGF-575 22.26 NA_144TH-C-GGF-575 22.26 NA_144TH-C-GGF-550 NA_144TH-C-GGF-550 NA_144TH-C-GGF-550 NA_144TH-C-GGF-550 21.68 NA_144TH-C-GGF-555 21.87 NA_144TH-C-GGF-555 NA_142TH-C-GGF-555 NA_142TH-C-GGF-555 NA_142TH-C-GGF-555 NA_142TH-C-GGF-555 NA_142TH-C-GGF-555 NA_142TH-C-GGF-555 NA_142TH-C-GGF-555 NA_142TH-C-GGF-555 NA_142TH-C-GGF-550 NA_15TH-C-GGF-550 NA_15TH-C-G					21.46	INA-156THC-GGF-600																
Na.144ThC.GGF-590 12.45 Na.144ThC.GGF-570 12.07 Na.144ThC.GGF-570 12.07 Na.144ThC.GGF-570 12.07 Na.144ThC.GGF-570 12.07 Na.144ThC.GGF-580 12.87 Na.144ThC.GGF-580 12.64					21.29	INA-156THC-GGF-595																
Bifacial N-Type TOPCon Module (Glass to Glass) NA-144TH-C-GGF-560 (S60 Wp) NA-144TH-C-GGF-560 (S60 Wp) NA-144TH-C-GGF-565 (S60 Wp) NA-132TH-C-GGF-565 (S60 Wp) NA-132TH-C-GGF-565 (S60 Wp) NA-132TH-C-GGF-567 (S60 Wp) NA-132TH-C-GGF-585 (S60 Wp) NA-132TH-C-GGF-365 (S60 Wp) NA-132TH-C-GGF-367 (S60 Wp) NA-132TH-C-GGF-370 (S60 Wp) NA-132TH-C-GGF-		-						+														
Bifacial N-Type TOPCon Module (Glass to Glass) NNA-144THC-GGF-560 NNA-144THC-GGF-550 NNA-144THC-GGF-550 NNA-144THC-GGF-550 NNA-144THC-GGF-550 NNA-144THC-GGF-550 NNA-144THC-GGF-550 NNA-144THC-GGF-550 NNA-144THC-GGF-550 NNA-144THC-GGF-550 NNA-124THC-GGF-540 NNA-124THC-GGF-540 NNA-124THC-GGF-540 NNA-124THC-GGF-540 NNA-124THC-GGF-540 NNA-124THC-GGF-540 NNA-124THC-GGF-530 NNA-124THC-GGF-530 NNA-124THC-GGF-530 NNA-124THC-GGF-530 NNA-124THC-GGF-530 NNA-124THC-GGF-530 NNA-124THC-GGF-530 NNA-124THC-GGF-530 NNA-124THC-GGF-540 NNA-124THC-GGF-540 NNA-124THC-GGF-540 NNA-124THC-GGF-540 NNA-124THC-GGF-540 NNA-124THC-GGF-540 NNA-124THC-GGF-540 NNA-124THC-GGF-440																						
NA-144THC-GGF-550 NA-144THC-GGF-550 11.68 NA-144THC-GGF-555 11.48 NA-144THC-GGF-555 NA-144THC-GGF-535 NA-132THC-GGF-535 NA-120THC-GGF-465 NA-120THC-GGF-470 NA-120TH					22.07	INA-144THC-GGF-570		Bifacial N-Type TOPCon														
Glass to Glass (S00 Wp) INA-144THC-GGF-555 21.48 INA-144THC-GGF-555 21.48 INA-144THC-GGF-555 21.48 INA-144THC-GGF-555 21.48 INA-144THC-GGF-536 21.10 INA-132THC-GGF-536 21.10 INA-132THC-GGF-536 22.73 INA-132THC-GGF-536 22.73 INA-132THC-GGF-530 22.31 INA-132THC-GGF-645 21.41 INA-132THC-GGF-645 21.62 INA-132THC-GGF-645 21.62 INA-132THC-GGF-645 21.64 INA-132THC-GGF-645 21.62 INA-132THC-GGF-6			1500	144 (Half Cut Cells)	21.87	INA-144THC-GGF-565			×													
INA-144THC-GGF-550 21.29 INA-144THC-GGF-545 21.10 INA-144THC-GGF-545 21.10 INA-144THC-GGF-545 INA-144THC-GGF-545 INA-144THC-GGF-545 INA-144THC-GGF-545 INA-144THC-GGF-545 INA-132THC-GGF-540 22.73 INA-132THC-GGF-530 22.31 INA-132THC-GGF-530 INA-132THC-GGF-630 INA-132THC-GGF-6330 INA-132THC-GGF-6330 INA-132THC-GGF-6330 INA-132THC-GGF-6330 INA-132THC-GGF-6330 INA-132THC-GGF-6330 INA-132THC-GGF-6330 INA-132THC-GGF-3370 INA-132THC-GGF-3				/			(560 Wp)		,													
NA-144THC-GGF-545 21.10																						
Bifacial N-Type TOPCon Module (Glass to Glass)					21.10	INA-144THC-GGF-545																
Module (Glass to Glass) Module (Glass to								Different N. F.	1													
Glass to Glass Gla		1	1500	132 (Half Cut Colle)					хi													
Bifacial N-Type TOPCon Module (Glass to Glass)			1300	_oz (an cut cens)			(530 Wp)															
Bifacial N-Type TOPCon Module (Glass to Glass) INA-120THC-GGF-455 INA-120THC-GGF-455 INA-120THC-GGF-465 INA-120THC-GGF-466 INA-120THC-GGF-46		_			21.89	INA-132THC-GGF-520																
Module (Glass to Glass)							INIA 120THC CCC 4CC	Bifacial N-Type TOPCon]													
Bifacial N-Type TOPCon Module (Glass to Glass)			1500	120 (Half Cut Cells)			l l	Module	xii													
Bifacial N-Type TOPCon Module (Glass to Glass)							(.05 ***)	(Glass to Glass)		1												
Module (Glass to Glass) INA-108THC-GGF-420 INA-108THC-GGF-420 21.41 108 (Half Cut Cells) 1500		1			21.92	INA-108THC-GGF-430																
Module (Glass to Glass)			4500	100 (11-15 0 / 5 " "			INA-108THC-GGF-420			1												
Bifacial N-Type TOPCon			1500	108 (Hair Cut Cells)					XIII	1												
Bifacial N-Type TOPCon NA-96THC-GGF-370 INA-96THC-GGF-375 21.33 INA-96THC-GGF-370 INA-96THC-GGF-370 21.05 96 (Half Cut Cells) 1500 INA-96THC-GGF-365 20.77 INA-96THC-GGF-365								(3,033 to Glass)		1												
xiv Module (Glass to Glass) (Glass to Glass) (INA-96THC-GGF-370 (10A-96THC-GGF-370 (10A-9		7			21.62	INA-96THC-GGF-380				l –												
(370 Wp) (370 Wp) (370 Wp) (370 Wp) (370 Wp) (1NA-96THC-GGF-370 21.05 96 (Half Cut Cells) 1500			4500	06/11-16 0 1 5 11 1			INA-96THC-GGF-370		l .	1												
			1500	эь (нап Cut Cells)					xiv	1												
// // // // // // // // // // // // //		1			20.77	INA-96THC-GGF-360		(Glass to Glass)														
Bifacial N-Type TOPCon INA_72THC_GGE_280 INA-72THC_GGF_285 21.23		7					INA-72THC CCF 200	Bifacial N-Type TOPCon														
NA-72THC-GGF-280			1500	72 (Half Cut Cells)	20.85	INA-72THC-GGF-280		Module	xv	1												

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: 27th March, 2025

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;

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. No. 283/22/2023-GRID SOLAR/Pt dated 10.05,2023 and O.M. of even no. dated 22.03.2024 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 requirement for crystalline-Silicon technology based Solar PV Modules	Minimum Module Efficiency requirement for Cadmium Telluride Thin Film technology based Solar PV Modules
Category I	Utility / Grid Scale Power Plants	20.0%	19.00%
Category II	Rooftop and Solar Pumping	19.5%	18.50%
Category III	Solar Lighting	19.0%	18.00%

- 3. Post the O.M. dated 10.05.2023 and subsequent O.M. dated 22.03.2024, 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 17.02.2025.
- 5. The List I (Manufacturers and Models of Solar PV Modules) of ALMM Order, 2019 is hereby further revised and the Revision-XXXVI of same is enclosed at Annexure-I. The details of provisional enlistments granted by MNRE in ALMM List-I are 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

S. No.	Name of the Manufacturer	Location of Manufacturing Facility	BIS Registration No.	Enlisted Capacity	S. No.	Type of Module	Applied Model	Enlisted Models	Module Efficiency (%)	No. of Cells in Module	System Voltage		Validity
		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		(MWs / Year)							(in Volt)	From	To (subject to valid BIS Registration; else deeemd to be delisted)
7	nsolation Energy Put 1td	Khasra No 766/2, Vill-Bagwara, Teh-	R-84002330	174		Mono c-Si PERC Module	INA72MP375	INA72MP375	19.23	72 (Full Cells)	1500	29.09.2023	28.09.2027
'	insolution Energy i vi. Eta	Amer Jaipur, Rajasthan	1. 04002330	1/4		World C SIT ENC WIGGIE	1147/21411 373	INA72MP395	19.80	72 (Full Cells)	1500	25.05.2025	20.03.2027
						Manage Ci DEDC Mandrida	IN A 724 4D205	INA72MP390	19.55	72 (511 (5.11-)	1500	20.00.2022	20.00.2027
					"	Mono c-Si PERC Module	INA72MP385	INA72MP385	19.30	72 (Full Cells)	1500	29.09.2023	28.09.2027
								INA72MP380	19.05				
39	M/s. Insolation Green	Khasra No 11/1, 1136/9, Chomu,	R-84003549	617				INA-144MHC-WF-520	20.14				
	Energy Pvt. Ltd	Jatavali, Jaipur-302001, Rajasthan						INA-144MHC-WF-525	20.33				
					i	Mono PERC c-Si Modules	INA-144MHC-WF-530 (530Wp)	INA-144MHC-WF-530	20.53	144 (Half Cut Cell)	1500	31.05.2023	30.05.2027
								INA-144MHC-WF-535 INA-144MHC-WF-540	20.72				
								INA-144MHC-WF-545	20.91 21.11				
								INA-144MHC-WF-545	20.14				
								INA-144MHC-TF-525	20.33				
						Bifacial Mono PERC c-Si		INA-144MHC-TF-530	20.53				
					ii	Modules	INA-144MHC-TF-530 (530Wp)	INA-144MHC-TF-535	20.72	144 (Half Cut Cell)	1500	31.05.2023	30.05.2027
								INA-144MHC-TF-540	20.91	•			
								INA-144MHC-TF-545	21.11				
								INA-132MHC-WF-480	20.19				
								INA-132MHC-WF-485	20.41				
					iii	Mono PERC c-Si Modules	INA-132MHC-WF-490 (490Wp)	INA-132MHC-WF-490	20.62	132 (Half Cut Cell)	1500	31.05.2023	30.05.2027
								INA-132MHC-WF-495	20.83				
								INA-132MHC-WF-500	21.04				
								INA-132MHC-TF-480	20.19				
						Bifacial Mono PERC c-Si	INA-132MHC-TF-490 (490Wp)	INA-132MHC-TF-485	20.41	132 (Half Cut Cell)		31.05.2023	
					iv	Modules		INA-132MHC-TF-490	20.62		1500		30.05.2027
								INA-132MHC-TF-495	20.83				
								INA-132MHC-TF-500 INA-120MHC-WF-435	20.04				
								INA-120MHC-WF-455	20.04				
					v	Mono PERC c-Si Modules	INA-120MHC-WF-440 (440Wp)	INA-120MHC-WF-445	20.50	120 (Half Cut Cell)	1500	31.05.2023	30.05.2027
								INA-120MHC-WF-450	20.73				
								INA-120MHC-TF-435	20.04				
					vi	Bifacial Mono PERC c-Si	INIA 120MHC TE 440 (440M/~)	INA-120MHC-TF-440	20.27	130 (Half Cut C-!!)	1500	31.05.2023	30.05.2027
					VI	Modules	INA-120MHC-TF-440 (440Wp)	INA-120MHC-TF-445	20.50	120 (Half Cut Cell)	1500	31.05.2023	30.05.2027
								INA-120MHC-TF-450	20.73				
								INA-108MHC-WF-390	19.86				
					vii	Mono PERC c-Si Modules	INA-108MHC-WF-395 (395Wp)	INA-108MHC-WF-395	20.11	108 (Half Cut Cell)	1500 31.05.2	31.05.2023	30.05.2027
							,	INA-108MHC-WF-400	20.37	,,			
					-			INA-108MHC-WF-405	20.62		+		
						Bifacial Mono PERC c-Si		INA-108MHC-TF-390 INA-108MHC-TF-395	19.86 20.11				
					viii	Modules	INA-108MHC-TF-395 (395Wp)	INA-108MHC-TF-400	20.11	108 (Half Cut Cell)	1500	31.05.2023	30.05.2027
						Modules		INA-108MHC-TF-405	20.62				
					<u> </u>			INA-144MHC-WF-550	21.29				
					ix	Mono c-Si PERC Module	INA-144MHC-WF-555	INA-144MHC-WF-555	21.48	144 Half Cut Cells	1500	31.05.2023	30.05.2027
								INA-144MHC-WF-560	21.68				
						Diferial Manner of Ci DECC		INA-144MHC-TF-550	21.29				
					×	Bifacial Mono c-Si PERC Module	INA-144MHC-TF-555	INA-144MHC-TF-555	21.48	144 Half Cut Cells	1500	31.05.2023	30.05.2027
						Module		INA-144MHC-TF-560	21.68				