

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: 6th January, 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 26.12.2024.

5. The List – I (Manufacturers and Models of Solar PV Modules) of ALMM Order, 2019 is hereby further revised and the Revision-XXXIII 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

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Encl: as above

To: All Concerned

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

List of Manufacturers and Models of Solar PV Modules Enlisted under ALMM Order (As on 6th January 2025)

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 deemed to be delisted)			
1	Emmvee Photovoltaic Power Pvt. Ltd.	#13/1, International Airport Road (Bellary Road), Bettahalsuru Post, Bengaluru-562157, Karnataka	R-62001074	512	i	Mono C-Si PERC Modules	E390M72 (390 Wp)	E385M72 E390M72 E395M72	19.20 19.45 19.70	72 (Full Cells)	1500	10.03.2023	09.03.2027			
					ii	Mono C-Si PERC Modules	E325M60 (325 Wp)	E320M60 E325M60 E330M60	19.04 19.34 19.64	60 (Full Cells)	1500	10.03.2023	09.03.2027			
2	M/s Sova Solar Ltd.	Layout Plot No: 25, E.P.I.P, Banskopa, Durgapur 713212, West Bengal, India.	R-51000590	532	i	Mono C-Si PERC Modules	SS535144HCMP (535Wp)	SS520144HCMP	20.16	144 (Half-Cut Cells)	1500	10.03.2023	09.03.2027			
								SS525144HCMP	20.35							
								SS530144HCMP	20.54							
								SS535144HCMP	20.74							
								SS540144HCMP	20.93							
								SS545144HCMP	21.13							
								SS550144HCMP	21.32							
								SS555144HCMP	21.51							
								SS520144HCBP	20.16							
					ii	Mono C-Si PERC Bifacial Modules	SS535144HCBP (535Wp)	SS525144HCBP	20.35							
								SS530144HCBP	20.54							
								SS535144HCBP	20.74							
								SS540144HCBP	20.93							
								SS545144HCBP	21.13							
								SS550144HCBP	21.32							
iii	Bifacial Mono c-Si PERC Modules (Glass to Transparent Backsheet)	SS535144HCMP (535Wp)	SS520144HCMP	20.16												
			SS525144HCMP	20.35												
			SS530144HCMP	20.54												
			SS535144HCMP	20.74												
			SS540144HCMP	20.93												
			SS545144HCMP	21.13												
3	M/s Solex Energy Ltd	Plot No. 131/A Phase-1, G.I.D.C, Vitthal Udyognagar, Anand, Gujarat	R-72002577	21	i	Mono C-Si PERC Modules	SESM24375 (375 Wp)	SESM24370	19.04	72 (Full Cells)	1000	10.03.2023	09.03.2027			
								SESM24375	19.30							
								SESM24380	19.55							
ii	Mono C-Si PERC Modules	SES20CM120W320 (320 Wp)	SES20CM120W320	19.21	120 (Half Cells)	1000	10.03.2023	09.03.2027								
			SES24CM144W375	19.01												
iii	Mono C-Si PERC Modules	SES24CM144W380 (380 Wp)	SES24CM144W380	19.30	144 (Half Cells)	1000	10.03.2023	09.03.2027								
			SES24CM144W385	19.51												
4	Saatvik Green Energy Pvt. Ltd.	Village Dubli, Tehshil- Barara, Dist- Ambala -133101, Haryana	R-91003670	1740	i	Mono C-Si PERC Modules	SGE 190-36M (190 Wp)	SGE 190-36M	19.11	36 (Full Cells)	1000	10.03.2023	09.03.2027			
								ii	Mono C-Si PERC Modules					SGE 255-48M (255 Wp)	SGE 255-48M	19.37
															SGE 280-54M	19.15
					iii	Mono C-Si PERC Modules	SGE 285-54M (285 Wp)	SGE 285-54M	19.49	54 (Full Cells)	1000	10.03.2023	09.03.2027			
								SGE 310-60M	19.08							
					iv	Mono C-Si PERC Modules	SGE 315-60M (315 Wp)	SGE 315-60M	19.41	60 (Full Cells)	1500	10.03.2023	09.03.2027			
								SGE 370-72M	19.09							
					v	Mono C-Si PERC Modules	SGE 375-72M (375 Wp)	SGE 375-72M	19.35	72 (Full Cells)	1500	10.03.2023	09.03.2027			
								SGE 380-72M	19.61							
					vi	Mono C-Si PERC Modules	SGE570-156MHC, (570 Wp)	SGE555-156MHC	19.78	156 (Half Cut Cells)	1500	10.03.2023	09.03.2027			
								SGE560-156MHC	19.96							
								SGE565-156MHC	20.14							
								SGE570-156MHC	20.32							
								SGE575-156MHC	20.50							
								SGE580-156MHC	20.67							
								SGE585-156MHC	20.85							
					vii	Mono C-Si PERC Modules	SGE530-144MHC, (530 Wp)	SGE590-156MHC	21.03	144 (Half Cut Cells)	1500	10.03.2023	09.03.2027			
SGE520-144MHC	20.13															
SGE525-144MHC	20.32															
SGE530-144MHC	20.52															
SGE535-144MHC	20.70															
SGE540-144MHC	20.90															
SGE545-144MHC	21.10															
SGE550-144MHC	21.29															
SGE470-132MHC	19.78															

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 deemed to be delisted)
					viii	Mono C-Si PERC Modules	SGE485-132MHC, (485 Wp)	SGE475-132MHC	20.01	132 (Half Cut Cells)	1500	10.03.2023	09.03.2027
								SGE480-132MHC	20.23				
								SGE485-132MHC	20.41				
								SGE490-132MHC	20.63				
								SGE495-132MHC	20.84				
								SGE500-132MHC	21.05				
					ix	Mono C-Si PERC Modules	SGE440-120MHC, (440 Wp)	SGE420-120MHC	19.37	120 (Half Cut Cells)	1500	10.03.2023	09.03.2027
								SGE425-120MHC	19.60				
								SGE430-120MHC	19.83				
								SGE435-120MHC	20.06				
								SGE440-120MHC	20.29				
								SGE445-120MHC	20.52				
					x	Mono C-Si PERC Modules	SGE395-108MHC, (395 Wp)	SGE450-120MHC	20.76	108 (Half Cut Cells)	1500	10.03.2023	09.03.2027
								SGE455-120MHC	20.99				
								SGE380-108MHC	19.44				
								SGE385-108MHC	19.69				
								SGE390-108MHC	19.95				
								SGE395-108MHC	20.20				
xi	Mono C-Si PERC Modules	SGE 395-72M, (395 Wp)	SGE400-108MHC	20.46	72 (Full Cell)	1500	10.03.2023	09.03.2027					
			SGE405-108MHC	20.71									
			SGE410-108MHC	20.98									
			SGE 385-72M	19.22									
xii	Bifacial Mono c-Si PERC Modules (Glass to Transparent Backsheet)	SGE535-144MBHC (535 Wp)	SGE 390-72M	19.47	144 (Half Cut Cells)	1500	10.03.2023	09.03.2027					
			SGE 395-72M	19.72									
			SGE 400-72M	19.97									
			SGE525-144MBHC	20.32									
			SGE530-144MBHC	20.52									
			SGE535-144MBHC	20.71									
xiii	Bifacial N Type TOPCon Module	SGE425-108TGG (425 Wp)	SGE540-144MBHC	20.90	108 (Half Cut Cells)	1500	10.03.2023	09.03.2027					
			SGE545-144MBHC	21.10									
			SGE550-144MBHC	21.29									
			SGE410-108TGG	20.97									
			SGE415-108TGG	21.22									
			SGE420-108TGG	21.48									
xiv	Bifacial N Type TOPCon Module	SGE475-120TGG (475 Wp)	SGE425-108TGG	21.74	120 (Half Cut Cells)	1500	10.03.2023	09.03.2027					
			SGE430-108TGG	21.99									
			SGE435-108TGG	22.25									
			SGE440-108TGG	22.51									
			SGE460-120TGG	21.21									
			SGE465-120TGG	21.46									
xv	Bifacial N Type TOPCon Module	SGE520-132TGG (520 Wp)	SGE470-120TGG	21.68	132 (Half Cut Cells)	1500	10.03.2023	09.03.2027					
			SGE475-120TGG	21.91									
			SGE480-120TGG	22.14									
			SGE485-120TGG	22.37									
			SGE490-120TGG	22.60									
			SGE510-132TGG	21.46									
xvi	Bifacial N Type TOPCon Module	SGE575-144TGG (575 Wp)	SGE515-132TGG	21.67	144 (Half Cut Cells)	1500	10.03.2023	09.03.2027					
			SGE520-132TGG	21.88									
			SGE525-132TGG	22.09									
			SGE530-132TGG	22.30									
			SGE535-132TGG	22.51									
			SGE560-144TGG	21.68									
xvii	Bifacial N Type TOPCon Module	SGE615-156TGG (615 Wp)	SGE565-144TGG	21.87	156 (Half Cut Cells)	1500	10.03.2023	09.03.2027					
			SGE570-144TGG	22.06									
			SGE575-144TGG	22.26									
			SGE580-144TGG	22.45									
			SGE585-144TGG	22.64									
			SGE590-144TGG	22.84									
xviii	Mono c-Si PERC Module	SGE500-144 MHC (500 Wp)	SGE600-156TGG	21.47	144 (Half Cut Cells)	1500	10.03.2023	09.03.2027					
			SGE605-156TGG	21.65									
5	Navitas Green Solutions Pvt. Ltd.	Plot No. B-20/3, Road No. 13, 14, Palsana-Baleswar Rd, Hoziwala Industrial Estate, Sachin, Surat-394230,	R-72003140	250	i	Mono C-Si PERC Modules	NSM375 (375 Wp)	SGE610-156TGG	21.83	72 (Full Cells)	1500	10.03.2023	09.03.2027
								SGE615-156TGG	22.01				
								SGE620-156TGG	22.19				
								SGE625-156TGG	22.37				
								NSM370	19.07				
								NSM375	19.33				
								NSM380	19.58				

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 deemed to be delisted)
		Gujarat			ii	Mono C-Si PERC Modules	NSM320-60 (320 Wp)	NSM310-60 NSM315-60 NSM320-60 NSM325-60 NSM330-60 NSM340-66	19.09 19.40 19.71 20.02 20.33 19.03	60 (Full Cells)	1500	10.03.2023	09.03.2027
					iii	Mono C-Si PERC Modules	NSM350-66 (350 Wp)	NSM345-66 NSM350-66 NSM355-66	19.31 19.59 19.87	66 (Full Cells)	1500	10.03.2023	09.03.2027
					iv	Mono PERC C-Si Module	NSM580-156 (580 Wp)	NSM570-156 NSM575-156 NSM580-156 NSM585-156	20.39 20.57 20.74 20.92	156 (Half Cut Cells)	1500	10.03.2023	09.03.2027
					v	Mono PERC C-Si Module	NSM540-144 (540 Wp)	NSM525-144 NSM530-144 NSM535-144 NSM540-144 NSM545-144 NSM550-144 NSM555-144 NSM560-144	20.32 20.51 20.71 20.90 21.09 21.29 21.48 21.67	144 (Half Cut Cells)	1500	10.03.2023	09.03.2027
					vi	Mono PERC C-Si Module	NSM500-132 (500 Wp)	NSM480-132 NSM485-132 NSM490-132 NSM495-132 NSM500-132	20.21 20.42 20.64 20.85 21.06	132 (Half Cut Cells)	1500	10.03.2023	09.03.2027
					vii	Mono PERC C-Si Module	NSM445-120 (445 Wp)	NSM435-120 NSM440-120 NSM445-120 NSM450-120 NSM455-120	20.09 20.33 20.56 20.79 21.02	120 (Half Cut Cells)	1500	10.03.2023	09.03.2027
					viii	Mono PERC C-Si Module	NSM400-108 (400 Wp)	NSM390-108 NSM395-108 NSM400-108 NSM405-108 NSM410-108	19.96 20.21 20.47 20.72 20.98	108 (Half Cut Cells)	1500	10.03.2023	09.03.2027
					ix	Mono PERC C-Si Module	NSM360-96 (360 Wp)	NSM350-96 NSM355-96 NSM360-96 NSM365-96	20.06 20.35 20.64 20.92	96 (Half Cut Cells)	1500	10.03.2023	09.03.2027
					x	Mono PERC C-Si Module	NSM270-72 (270 Wp)	NSM260-72 NSM265-72 NSM270-72 NSM275-72	19.62 20.00 20.38 20.76	72 (Half Cut Cells)	1500	10.03.2023	09.03.2027
					xi	Mono PERC C-Si Module	NSM470-156 (470 Wp)	NSM460-156 NSM465-156 NSM470-156 NSM475-156 NSM480-156 NSM485-156	19.65 19.86 20.07 20.29 20.50 20.72	156 (Half Cut Cells)	1500	10.03.2023	09.03.2027
					xii	Mono PERC C-Si Module	NSM450-144 (450 Wp)	NSM435-144 NSM440-144 NSM445-144 NSM450-144 NSM455-144 NSM460-144 NSM465-144	20.08 20.32 20.78 20.55 21.01 21.64 21.47	144 (Half Cut Cells)	1500	10.03.2023	09.03.2027
					xiii	Mono PERC C-Si Module	NSM405-132 (405 Wp)	NSM395-132 NSM400-132 NSM405-132 NSM410-132 NSM415-132	19.85 20.10 20.35 20.60 20.85	132 (Half Cut Cells)	1500	10.03.2023	09.03.2027
					xiv	Mono PERC C-Si Module	NSM370-120 (370 Wp)	NSM360-120 NSM365-120 NSM370-120 NSM375-120	19.84 20.11 20.39 20.66	120 (Half Cut Cells)	1500	10.03.2023	09.03.2027
					xv	Mono PERC C-Si Module	NSM330-108 (330 Wp)	NSM320-108 NSM325-108 NSM330-108 NSM335-108 NSM340-108	19.52 19.82 20.13 20.43 20.74	108 (Half Cut Cells)	1500	10.03.2023	09.03.2027

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 deemed to be delisted)														
					xvi	Mono PERC C-Si Module	NSM290-96 (290 Wp)	NSM285-96	19.47	96 (Half Cut Cells)	1500	10.03.2023	09.03.2027														
								NSM290-96	19.81																		
								NSM295-96	20.15																		
								NSM300-96	20.49																		
					xvii	Mono PERC C-Si Module	NSM220-72 (220 Wp)	NSM215-72	19.32	72 (Half Cut Cells)	1500	10.03.2023	09.03.2027														
								NSM220-72	19.77																		
								NSM225-72	20.22																		
								NSM385	19.40																		
					xviii	Mono PERC C-Si Module	NSM395 (395 Wp)	NSM390	19.65	72 (Full Cells)	1500	10.03.2023	09.03.2027														
								NSM395	19.90																		
								NSM400	20.15																		
								NSM400	20.15																		
					xix	Mono PERC C-Si Module	NSM-WBPR64 - MIO-160(160Wp)	NSM-WBPR64 - MIO-160	19.82	64 (Half Cut Cells)	1000	10.03.2023	09.03.2027														
					xx	Mono PERC C-Si Module	NSM-WBPR60 - MIO-225(225Wp)	NSM-WBPR60 - MIO-225	20.28	60 (Half Cut Cells)	1000																
					xxi	Mono PERC C-Si Module	NSM-WBPR56 - MIO-210(210Wp)	NSM-WBPR56 - MIO-210	20.26	56(Half Cut Cells)	1000																
					xxii	Mono PERC C-Si Module	NSM-WBPR52 - MIO-200(200Wp)	NSM-WBPR52 - MIO-200	20.72	52 (Half cut Cells)	1000																
					xxiii	Mono PERC C-Si Module	NSM-WBPR48 - MIO-180(180Wp)	NSM-WBPR48 - MIO-180	20.13	48 (Half Cut Cells)	1000																
					xxiv	Mono PERC C-Si Module	NSM-WBPR44 - MIO-110(110Wp)	NSM-WBPR44 - MIO-110	19.38	44 (Half Cut Cells)	1000																
					xxv	Mono PERC C-Si Module	NSM-WBPR44 - MIO-165(165Wp)	NSM-WBPR44 - MIO-160	20.05	44 (Half Cut Cells)	1000																
					xxvi	Mono PERC C-Si Module	NSM-WBPR40 - MIO-150(150Wp)	NSM-WBPR40 - MIO-150	19.95	40 (Half Cut Cells)	1000																
xxvii	Mono PERC C-Si Module	NSM-WBPR36 - MIO-90(90Wp)	NSM-WBPR36 - MIO-90	19.07	36 (Half Cut Cells)	1000																					
xxviii	Mono PERC C-Si Module	NSM-WBPR36 - MIO-135(135Wp)	NSM-WBPR36 - MIO-135	19.83	36 (Half Cut Cells)	1000																					
xxix	Mono PERC C-Si Module	NSM-WBPR32 - MIO-120(120Wp)	NSM-WBPR32 - MIO-120	19.68	32 (Half Cut Cells)	1000																					
6	Jakson Engineers Ltd.	Plot No-25, Ecotech-III, Udyog Kendra, Greater NOIDA-201306, Gautam Budha Nagar, Uttar Pradesh, India.	R-93005959	1162	i	Mono C-Si PERC Modules	JH-440M, (440Wp)	JH-420M	19.26	120 (Half-Cut Cells)	1500			17.08.2023	16.08.2027												
								JH-425M	19.49																		
								JH-430M	19.71																		
								JH-435M	19.94																		
								JH-440M	20.17																		
								JH-445M	20.40																		
								JH-450M	20.63																		
								JH-455M	20.86																		
								JH-460M	21.09																		
								JH-470M	19.66																		
								JH-475M	19.87																		
								JH-480M	20.08																		
					ii	Mono C-Si PERC Modules	JH-490M, (490Wp)	JH-485M	20.29	132 (Half-Cut Cells)	1500	17.08.2023	16.08.2027														
								JH-490M	20.50																		
								JH-495M	20.71																		
								JH-500M	20.92																		
								JH-505M	21.13																		
								JH-510M	21.34																		
								JH-515M	19.85																		
								JH-520M	20.04																		
								JH-525M	20.23																		
								JH-530M	20.43																		
								JH-535M	20.62																		
								JH-540M	20.81																		
					iii	Mono C-Si PERC Modules	JH-535M, (535Wp)	JH-545M	21.00	144 (Half-Cut Cells)	1500	17.08.2023	16.08.2027														
								JH-550M	21.20																		
								JH-555M	21.39																		
								JH-580M	20.67																		
								JH-585M	20.85																		
								JH-590M	21.03																		
								JH-595M	21.21																		
								JH-600M	21.38																		
								JP-H385M	19.37																		
								JP-H390M	19.62																		
								JP-H395M	19.87																		
								JP-H400M	20.12																		
					iv	Mono C-Si PERC Modules	JH-580M, (580Wp)	JP-H405M	20.37	72 (Full Cells)	1500	17.08.2023	16.08.2027														
								JP-H380M	19.28																		
								JH-385M	19.53																		
								JH-390M	19.79																		
								JH-395M	20.04																		
								JH-400M	20.29																		
								JH-405M	20.55																		
								JH-410M	20.88																		
								JH-415M	21.06																		
								JH-380BB	19.48																		
								JH-385BB	19.73																		
								JH-390BB	19.99																		
					v	Mono C-Si PERC Modules	JP-H395M, (385Wp-405Wp)	JH-395BB	20.25	108 (Half-Cut Cells)	1500	17.08.2023	16.08.2027														
								JH-385BB	19.73																		
								JH-390BB	19.99																		
								JH-395BB	20.25																		
								vi	Mono C-Si PERC Modules					JH-400M, (400Wp)	JH-395BB	20.25	108 (Half-Cut Cells)	1500	17.08.2023	16.08.2027							
															JH-385BB	19.73											
															JH-390BB	19.99											
															JH-395BB	20.25											
															vii	Mono c-Si Bifacial PERC					JH-400BR	JH-385BB	19.73	108 (Half Cut Cells)	1500	17.08.2023	16.08.2027
																						JH-380BB	19.48				
																						JH-390BB	19.99				
																						JH-395BB	20.25				

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 deemed to be delisted)
						Module		JH-400BB	20.50				
								JH-405BB	20.76				
								JH-410BB	21.01				
								JH-415BB	21.27				
								JH-420BB	19.39				
					viii	Mono c-Si Bifacial PERC Module	JH-440BB	JH-425BB	19.62	120 (Half Cut Cells)	1500	17.08.2023	16.08.2027
								JH-430BB	19.85				
								JH-435BB	20.08				
								JH-440BB	20.31				
								JH-445BB	20.54				
								JH-450BB	20.77				
								JH-455BB	21.00				
								JH-460BB	21.23				
								JH-475BB	20.02				
					ix	Mono c-Si Bifacial PERC Module	JH-490BB	JH-480BB	20.23	132 (Half Cut Cells)	1500	17.08.2023	16.08.2027
								JH-485BB	20.44				
								JH-490BB	20.65				
								JH-495BB	20.86				
								JH-500BB	21.07				
								JH-505BB	21.29				
								JH-510BB	21.50				
								JH-515BB	21.71				
								JH-520BB	20.15				
								JH-525BB	20.34				
								JH-530BB	20.53				
					x	Mono c-Si Bifacial PERC Module	JH-535BB	JH-535BB	20.73	144 (Half Cut Cells)	1500	17.08.2023	16.08.2027
								JH-540BB	20.92				
								JH-545BB	21.11				
								JH-550BB	21.31				
								JH-555BB	21.50				
								JH-380BT	19.48				
								JH-385BT	19.73				
								JH-390BT	19.99				
								JH-395BT	20.25				
								JH-400BT	20.50				
								JH-405BT	20.76				
								JH-410BT	21.01				
								JH-415BT	21.27				
								JH-420BT	19.39				
								JH-425BT	19.62				
								JH-430BT	19.85				
								JH-435BT	20.08				
					xii	Mono c-Si Bifacial PERC Module	JH-440BT	JH-440BT	20.31	120 (Half Cut Cells)	1500	17.08.2023	16.08.2027
								JH-445BT	20.54				
								JH-450BT	20.77				
								JH-455BT	21.00				
								JH-460BT	21.23				
								JH-475BT	20.02				
								JH-480BT	20.23				
								JH-485BT	20.44				
								JH-490BT	20.65				
								JH-495BT	20.86				
								JH-500BT	21.07				
								JH-505BT	21.29				
								JH-510BT	21.50				
								JH-515BT	21.71				
								JH-520BT	20.15				
								JH-525BT	20.34				
								JH-530BT	20.53				
								JH-535BT	20.73				
								JH-540BT	20.92				
								JH-545BT	21.11				
								JH-550BT	21.31				
								JH-555BT	21.50				
								JH-380BW	19.48				
								JH-385BW	19.73				
								JH-390BW	19.99				
								JH-395BW	20.25				
								JH-400BW	20.50				
								JH-405BW	20.76				
								JH-410BW	21.01				
								JH-415BW	21.27				
					xv	Mono c-Si Bifacial PERC Module	JH-400BW	JH-400BW	20.50	108 (Half Cut Cells)	1500	17.08.2023	16.08.2027

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 deemed to be delisted)
					xvi	Mono c-Si Bifacial PERC Module	JH-440BW	JH-420BW	19.39	120 (Half Cut Cells)	1500	17.08.2023	16.08.2027
				JH-425BW				19.62					
				JH-430BW				19.85					
				JH-435BW				20.08					
				JH-440BW				20.31					
				JH-445BW				20.54					
				JH-450BW				20.77					
				JH-455BW				21.00					
				JH-460BW				21.23					
				JH-475BW				20.02					
				xvii	Mono c-Si Bifacial PERC Module	JH-490BW	JH-480BW	20.23	132 (Half Cut Cells)	1500	17.08.2023	16.08.2027	
							JH-485BW	20.44					
							JH-490BW	20.65					
							JH-495BW	20.86					
							JH-500BW	21.07					
							JH-505BW	21.29					
							JH-510BW	21.50					
							JH-515BW	21.71					
							JH-520BW	20.15					
							JH-525BW	20.34					
				xviii	Mono c-Si Bifacial PERC Module	JH-535BW	JH-530BW	20.53	144 (Half Cut Cells)	1500	17.08.2023	16.08.2027	
							JH-535BW	20.73					
							JH-540BW	20.92					
							JH-545BW	21.11					
							JH-550BW	21.31					
							JH-555BW	21.50					
							JN-400BT	20.50					
							JN-405BT	20.76					
							JN-410BT	21.01					
							JN-415BT	21.27					
				xix	N-Type TOPCon Module (Glass to Transparent Backsheet)	JN-420BT (420 Wp)	JN-420BT	21.53	108 (Half Cut Cells)	1500	17.08.2023	16.08.2027	
							JN-425BT	21.78					
							JN-430BT	22.04					
							JN-435BT	22.29					
							JN-440BT	22.55					
							JN-445BT	20.54					
							JN-450BT	20.77					
							JN-455BT	21.00					
							JN-460BT	21.23					
							JN-465BT	21.46					
				xx	N-Type TOPCon Module (Glass to Transparent Backsheet)	JN-470BT (470 Wp)	JN-470BT	21.70	120 (Half Cut Cells)	1500	17.08.2023	16.08.2027	
							JN-475BT	21.93					
							JN-480BT	22.16					
							JN-485BT	22.39					
							JN-490BT	22.62					
							JN-495BT	20.86					
							JN-500BT	21.07					
							JN-505BT	21.28					
							JN-510BT	21.50					
							JN-515BT	21.71					
				xxi	N-Type TOPCon Module (Glass to Transparent Backsheet)	JN-520BT (520 Wp)	JN-520BT	21.92	132 (Half Cut cells)	1500	17.08.2023	16.08.2027	
							JN-525BT	22.13					
							JN-530BT	22.34					
							JN-535BT	22.55					
							JN-540BT	22.76					
							JN-545BT	21.12					
							JN-550BT	21.31					
							JN-555BT	21.50					
							JN-560BT	21.70					
							JN-565BT	21.89					
				xxii	N-Type TOPCon Module (Glass to Transparent Backsheet)	JN-570BT (570 Wp)	JN-570BT	22.08	144 (Half Cut Cells)	1500	17.08.2023	16.08.2027	
							JN-575BT	22.28					
							JN-580BT	22.47					
							JN-585BT	22.66					
							JN-590BT	22.86					
							JN-400G	20.50					
							JN-405G	20.76					
							JN-410G	21.01					
							JN-415G	21.27					
							JN-420G	21.53					
				xxiii	N-Type TOPCon Module (Glass to Glass)	JN-420G (420 Wp)	JN-425G	21.78	108 (Half Cut Cells)	1500	17.08.2023	16.08.2027	
							JN-430G	22.04					

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 deemed to be delisted)							
					xxiv	N-Type TOPCon Module (Glass to Glass)	JN-470G (470 Wp)	JN-435G	22.29	120 (Half Cut Cells)	1500	17.08.2023	16.08.2027							
								JN-445G	20.54											
								JN-450G	20.77											
								JN-455G	21.00											
								JN-460G	21.23											
								JN-465G	21.46											
								JN-470G	21.70											
								JN-475G	21.93											
								JN-480G	22.16											
								JN-485G	22.39											
								JN-495G	20.86											
								JN-500G	21.07											
								JN-505G	21.28											
								JN-510G	21.50											
								JN-515G	21.71											
					xxv	N-Type TOPCon Module (Glass to Glass)	JN-520G (520 Wp)	JN-520G	21.92	132 (Half Cut cells)	1500	17.08.2023	16.08.2027							
								JN-525G	22.13											
								JN-530G	22.34											
								JN-545G	21.12											
								JN-550G	21.31											
								JN-555G	21.50											
								JN-560G	21.70											
								JN-565G	21.89											
								JN-570G	22.08											
								JN-575G	22.28											
								JN-580G	22.47											
								xxvi	N-Type TOPCon Module (Glass to Glass)					JN-570G (570 Wp)	JN-570G	22.08	144 (Half Cut Cells)	1500	17.08.2023	16.08.2027
															JN-575G	22.28				
															JN-580G	22.47				
															JN-585G	22.66				
JN-590G	22.85																			
JN-595G	23.04																			
JN-600G	23.23																			
JN-605G	23.42																			
JN-610G	23.61																			
JN-615G	23.80																			
7	Insolation Energy Pvt. Ltd	Khasra No 766/2, Vill-Bagwara, Teh-Amer Jaipur, Rajasthan	R-84002330	174	i	Mono c-Si PERC Module	INA72MP375	INA72MP375	19.23	72 (Full Cells)	1500	29.09.2023	28.09.2027							
ii					Mono c-Si PERC Module	INA72MP385	INA72MP385	19.55	72 (Full Cells)	1500	29.09.2023	28.09.2027								
8	Gautam Solar Pvt. Ltd.	Plot No-67-70, Sector-8A IIE, Sidcul Haridwar- 249403, Uttarakhand	R-83006041	710	i	Mono c-Si PERC Modules	G2XBifacial1767-HAE (590 Wp) (595Wp)	G2XBifacial1734-HAE	20.20	156 (Half Cut Cells)	1500	29.09.2023	28.09.2027							
								G2XBifacial1741-HAE	20.38											
								G2XBifacial1747-HAE	20.56											
								G2XBifacial1754-HAE	20.74											
								G2XBifacial1760-HAE	20.92											
								G2XBifacial1767-HAE	21.10											
								G2XBifacial1773-HAE	21.28											
								G2XBifacial1663-HAD	19.74											
								G2XBifacial1669-HAD	19.94											
								G2XBifacial1676-HAD	20.13											
					ii	Mono c-Si PERC Modules	G2XBifacial1695-HAD (535 Wp) (510Wp-550Wp)	G2XBifacial1682-HAD	20.32	144 (Half Cut Cells)	1500	29.09.2023	28.09.2027							
								G2XBifacial1689-HAD	20.52											
								G2XBifacial1695-HAD	20.71											
								G2XBifacial1702-HAD	20.90											
								G2XBifacial1708-HAD	21.10											
								G2XBifacial1715-HAD	21.29											
								G2XBifacial1656-HAB	21.13											
								G2XBifacial1650-HAB	20.92											
								G2XBifacial1643-HAB	20.71											
								G2XBifacial1637-HAB	20.50											
					iii	Mono c-Si PERC Modules	G2XBifacial1643-HAB (495 Wp) (485Wp-505Wp)	G2XBifacial1630-HAB	20.29	132 (Half Cut Cells)	1500	29.09.2023	28.09.2027							
								G2XBifacial1598-HAA	21.09											
								G2XBifacial1591-HAA	20.87											
								G2XBifacial1585-HAA	20.64											
					iv	Mono c-Si PERC Modules	G2XBifacial1585-HAA (450 Wp) (440Wp-460Wp)	G2XBifacial1578-HAA	20.41	120 (Half Cut Cells)	1500	29.09.2023	28.09.2027							
								G2XBifacial1572-HAA	20.18											
								G2XBifacial1539-HAY	21.06											
								G2XBifacial1533-HAY	20.80											
					v	Mono c-Si PERC Modules	G2XBifacial1526-HAY (405 Wp) (390Wp-415Wp)	G2XBifacial1526-HAY	20.55	108 (Half Cut Cells)	1500	29.09.2023	28.09.2027							
								G2XBifacial1520-HAY	20.30											
G2XBifacial1507-HAY	19.79																			
G2XBifacial1474-HAX	20.71																			
vi	Mono c-Si PERC Modules	G2XBifacial1468-HAX (360 Wp) (365Wp-350Wp)	G2XBifacial1468-HAX	20.43	96 (Half Cut Cells)	1500	29.09.2023	28.09.2027												
			G2XBifacial1461-HAX	20.14																
			G2XBifacial1455-HAX	19.86																
			G2X565-HAE	20.20																
vii	Mono c-Si PERC Modules	G2X590-HAE (590 Wp)	G2X570-HAE	20.38	156 (Half Cut Cells)	1500	29.09.2023	28.09.2027												
			G2X575-HAE	20.56																
			G2X580-HAE	20.74																
			G2X585-HAE	20.92																