

		बि.एच.ई.एल. BHEL BHEL-EPD	ELECTRIC & PHOTOVOLTAIC DIVISION BENGALURU – 560012, INDIA DATASHEET SPV ENGINEERING	DOC. NO: SPV-4-02-00013																					
				REV. 00	JOB NO.- SP1077																				
				PAGE 01 OF 02	DT 12.08.20																				
COPY RIGHT AND CONFIDENTIAL The information on this document is the property of Bharat Heavy Electricals Limited. It must not be used directly or indirectly in anyway detrimental to the interest of the company.	SOLAR PHOTOVOLTAIC MODULE																								
	1. PV MODULE TYPE : MULTI CRYSTALLINE SOLAR MODULE																								
	2. CONFIGURATION : SINGLE GLASS LAMINATED TYPE WITH 72 NOS. OF 156.75 mm ± 0.5 mm / 157 mm ± 0.5 mm (Typ.) SOLAR CELLS (12*6) IN SERIES CONFIGURATION.																								
	3. OVERALL SIZE : 1966 (±3) * 986 (±2) * 35 (±1) mm																								
	4. WEIGHT : 22.5 Kg. (Typ.)																								
	5. MAJOR BILL OF MATERIAL																								
	<table><thead><tr><th>SL NO.</th><th>BILL OF MATERIAL</th><th>DETAILS</th></tr></thead><tbody><tr><td>1</td><td>SOLAR CELL</td><td>MULTI CRYSTALLINE, HIGH EFFICIENCY, PID RESISTANT</td></tr><tr><td>2</td><td>SOLAR GLASS</td><td>ANTI REFLECTION COATED, LIGHT TRANSMISSION ≥ 93.5%, THICKNESS 3.2 mm</td></tr><tr><td>3</td><td>EVA SHEET</td><td>OPTICAL TRANSMITTANCE > 91%, PID RESISTANT, UV & WEATHER STABLE</td></tr><tr><td>4</td><td>BACK SHEET</td><td>THREE LAYERED STRUCTURE, FLUOROPOLYMER & PET BASED, THICKNESS MIN. 300 MICRONS</td></tr><tr><td>5</td><td>FRAME</td><td>ANODISED ALUMINIUM FRAME (ANODIZATION THICKNESS 18 ± 3 MICRONS)</td></tr><tr><td>6</td><td>JUNCTION BOX</td><td>IP 67 GRADE JUNCTION BOX WITH CABLES AND CONNECTORS (TUV CERTIFICATED), 1 KV</td></tr></tbody></table>				SL NO.	BILL OF MATERIAL	DETAILS	1	SOLAR CELL	MULTI CRYSTALLINE, HIGH EFFICIENCY, PID RESISTANT	2	SOLAR GLASS	ANTI REFLECTION COATED, LIGHT TRANSMISSION ≥ 93.5%, THICKNESS 3.2 mm	3	EVA SHEET	OPTICAL TRANSMITTANCE > 91%, PID RESISTANT, UV & WEATHER STABLE	4	BACK SHEET	THREE LAYERED STRUCTURE, FLUOROPOLYMER & PET BASED, THICKNESS MIN. 300 MICRONS	5	FRAME	ANODISED ALUMINIUM FRAME (ANODIZATION THICKNESS 18 ± 3 MICRONS)	6	JUNCTION BOX	IP 67 GRADE JUNCTION BOX WITH CABLES AND CONNECTORS (TUV CERTIFICATED), 1 KV
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6. CERTIFICATION ON SPV MODULE:																									
▪ IEC 61215, IS 14286: Crystalline silicon terrestrial photovoltaic (PV) modules – Design qualification and type approval ▪ IEC 61730-1, IS / IEC 61730-1: Photovoltaic (PV) module safety qualification – Part 1: Requirements for construction ▪ IEC 61730-2, IS / IEC 61730-2: Photovoltaic (PV) module safety qualification – Part 2: Requirements for testing																									
ಕೇಂದ್ರ ಕಛೇರಿ: ಬಿಎಚ್‌ಇಎಲ್ ಹೌಸ್,ಸಿರಿಫೋರ್ಟ್,ನವದೆಹಲಿ-110049 पंजीकृत कार्यालय:बीएचइएल हाउस,नईदिल्ली-110049, REGD.OFFICE : BHEL HOUSE SIRIFORT,NEW DELHI- 110049																									

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COPY RIGHT AND CONFIDENTIAL The information on this document is the property of Bharat Heavy Electricals Limited. It must not be used directly or indirectly in anyway detrimental to the interest of the company.	7. PERFORMANCE WARRANTY: - Product Warranty: The modules are warranted for 5 years for failures due to material defects and workmanship. - Performance Warranty: Peak power output shall not be less than 90% at the end of 10 years and 80% at the end of 25 years from the completion of the trial run. The warranty is subject to standard terms & conditions of sale and adherence by the customer to the installation & operation manual and instructions thereof.																			
	8. TYPICAL ELECTRICAL CHARACTERISTICS:																			
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	NOTE:																			
	1. Electrical specifications mentioned above are at Standard Test Conditions of 100 mW/sq.cm solar insolation (AM 1.5) and at 25 deg. C temperature.																			
	2. Measurement repeatability of peak power output: ± 3%.																			
	3. Maximum System Voltage is 1000V DC.																			
	Abbreviation:																			
- OPEN CIRCUIT VOLTAGE (Voc), SHORT CIRCUIT CURRENT (Isc) - VOLTAGE AT PEAK POWER POINT (Vmp) - CURRENT AT PEAK POWER POINT (Imp) - PEAK POWER OUTPUT (P max).																				
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