



**TECHNICAL SPECIFICATION**

**Poly-Crystalline Solar Cell**

Code

ND9A30012A1B457

Used in

SPV Module (325W)

Disclaimer  
 (COPY RIGHT AND CONFIDENTIAL) The information in this document is the property of ITI Limited It must not be used directly or indirectly in any way detrimental to the interest of the company

Parameter	Specification
Solar Cell	Multi Crystalline Silicon Solar Cell
Dimension	157mm X 157mm $\pm$ 0.25mm
Thickness	Over all cell 200 $\mu$ m $\pm$ 20 $\mu$ m
Colour	Light Blue/ Blue/ Dark Blue/ Indigo
Anti reflection coating	Anti-reflecting coating (Silicon Nitride) ( PID Free)
Front Contact (-ve)	5 nos., 0.7 mm +/- 0.1 mm (typical) wide Silver Bus Bar (Continuous or discrete)
Back Contacts (+ve)	5 nos., 1.8 mm +/- 0.1 mm (typical) wide Silver Bus Bars with Aluminium back surface field (continuous or discrete)
Bus Bar Distance	31.2 mm $\pm$ 0.2 mm
Solderability	Good solderability of cell front & back contacts with Copper Ribbon of SnPb (60-40)
Cell Efficiency at STC	18.60% (minimum)
Cell Power (P <sub>m</sub> ) at STC	Minimum 4.57 W <sub>p</sub> (Tolerance-0%, +2%)
Short Ckt Current, I <sub>sc</sub>	8.95 A (Typical)
Current at MPP ( I <sub>mp</sub> )	Better than 8.45 A
Open Ckt Voltage, Voc	0.635 V (Typical)
Voltage at MPP( V <sub>mp</sub> )	0.541 V
Fill Factor	80 % (Typical)
Temperature Coefficient	I <sub>sc</sub> (Alpha) : 0.04%/K or better
	Voc ( Beta) : -0.36%/K or better
	P <sub>mpp</sub> (Gama) : -0.40%/K or better
All cells shall be free from following visual defects- 1. Edge Chipping, Edge Broken. 2. Micro Cracks, Pin Holes. 3. Discontinuity of metal printing lines. 4. Any spot, spillage or spear of paste. 5. Colour variation of ARC. 6. Non uniform printing or spreading of fine lines.	

Prepared By	<i>Pradeep Singh</i>	<i>AEECTS</i>	Rev	2
Checked By	<i>Heml</i>	<i>MTS</i>	Issue	1
Approved By	<i>J. S. Higgins</i>	<i>CM(W)</i>	Date	20.02.2021
			Page	1/2

DISTRIBUTED BY ICI  
 UNCONTROLLED / UNRECORDED  
 COPY NO. 01... ISSUE NO. 01...  
 DATE 23/02/21... SIG. *[Signature]*



**TECHNICAL SPECIFICATION**  
Poly-Crystalline Solar Cell

Code	ND9A30012A1B457
Used in	SPV Module (325W)

Disclaimer  
 (COPY RIGHT AND COFIDENTIAL) The information in this document is the property of ITI Limited It must not be used directly or indirectly in any way detrimental to the interest of the company

**General Requirements**

- |  |
|--|
| 1. Point wise Compliance statement of the Technical Specification including general terms and condition along with complete catalogue must be attached with the technical bid. |
| 2. Specify OEM details and Part no. of the offered product (not other product).  |
| 3. Vendor to furnish customer references.  |

Prepared By	<i>Pradeep Singh</i>	AEE (TS)	Rev	2
Checked By	<i>AKM</i>	M(LTS)	Issue	1
Approved By	<i>J.S. Higgins</i>	CM(W)	Date	20.02.2021
			Page	2/2

DISTRIBUTED BY C  
 UNCONTROLLED  
 COPY NO. 01  
 DATE 23/02/21

DISTRIBUTED BY C  
 UNCONTROLLED  
 COPY NO. 01  
 DATE 23/02/21  
 ISSUE NO. 01  
 SIG *[Signature]*

## **STANDARD INFORMATION**

- 1.Tender Title : Solar Cell**
- 2.Tender Ref. No.:- NPH1E0001**
- 3.Product category :- Miscellaneous Goods**
- 4.Product subcategory :- N/A**
- 5.Tender Value :- Rs. 96.51 Lakh (Approx)**
- 6.Tender EMD :- N/A**
- 7.Tender Document cost :- Nil**
- 8.Tender Type :- Buy**
- 9. Location :- ITI LTD. NAINI PRAYAGRAJ (ALLAHABAD)**
- 10.First Announcement date / time :-05.08.2021**
- 11.Last date / time for submission :-18.08.2021/05:00 PM**
- 12.Opening date / time :- 19.08.2021/11:00 AM**
- 13.Work description :- As per Tender**
- 14.Pre-qualification :- N/A**