**SUPPLEMENTARY MATERIAL 1**

**Table A: Specification of 20 W PV module**

|  |  |
| --- | --- |
| **Make** | **Microtek** |
| Peak Power (*Pmax*) | 20 W |
| Peak Voltage (*Vmp*) | 18 V |
| Peak Current (*Imp*) | 1.12 A |
| Short Circuit Current (*Isc*) | 1.2 A |
| Open Circuit Voltage (*Voc*) | 22 V |
| Max. System Voltage | 600 V |
| Application Class | A |
| Country of Origin | INDIA |
| Safety Class | II |

**Table B: Probable error in the measurement**

|  |  |  |  |
| --- | --- | --- | --- |
| **Parameter** | **Instrument** | **Range** | **Error** |
| Solar radiation | EKO MS-80S  (Pyranometer) | 0-2000 W/m2 | ±10 W/m2 |
| *Voc*, *Isc*, Pmax | MECO  (PV analyzer) | 0-60 V; 0.01-10 A | ±1 % of reading |
| Temperature | Thermocouple (K- type) | -200 to 1260 ℃ | ± 0.5 ℃ |