What is STC and why is it significant?

All PV modules have a performance rating which details the module's performance under a set of controlled conditions, the rating includes values for open circuit voltage (Voc), short circuit current (Isc), current and voltage at the maximum power point and the maximum power (Pmax). Manufacturers measure the rating plate values under standard test conditions (STC) with an irradiance of 1000W/m2, a module temperature of 25 C and using an irradiance source equivalent to an air mass AM=1.5.

The voltage and current performance of a PV module depend on the irradiance level, the spectral content of the irradiance and the module temperature. When PV modules are produced, manufacturers check the performance and determine the plate values by carrying out an I-V curve measurement.

If you require more help, please contact us at https://www.seaward.com/sitemap/enquiry/.