

(PREVIEW)

Indian Standard

PHOTOVOLTAIC DEVICES

PART 5 DETERMINATION OF THE EQUIVALENT CELL TEMPERATURE (ECT) OF PHOTOVOLTAIC (PV) DEVICES BY THE OPEN-CIRCUIT VOLTAGE METHOD

1 Scope and object

This part of IEC 904 applies to crystalline silicon devices only.

It describes the preferred method for determining the equivalent cell temperature (ECT) of PV devices {cells, modules and arrays of one type of module), for the purposes of comparing their thermal characteristics, determining NOCT (nominal operating cell temperature) and translating measured I-V characteristics to other temperatures.

2 Normative references

The following normative documents contain provisions which, through reference in this text, constitute provisions of this part of IEC 904. At the time of publication, the editions indicated were valid. All normative documents are subject to revision, and parties to agreements based on this part of IEC 904 are encouraged to investigate the possibility of applying the most recent editions of the normative documents indicated below. Members of IEC and ISO maintain registers of currently valid International Standards.

IEC 891: 1987, *Procedures for temperature and irradiance corrections to measured I-V characteristics of crystalline silicon photovoltaic devices*

IEC 904-1: 1987, *Photovoltaic devices - Part 1: Measurement of photovoltaic current-voltage Characteristics*