

Abstract

The invention relates to a contact device for contacting multiple sub-cells of solar cells that are physically and electrically separate from one another and also to
5 an arrangement and a method for characterising such sub-cells. The contact device comprises a planar carrier element with at least two back-side contact arrangements or at least two planar carrier elements each with at least one back-side contact arrangement, at least one front-side contact arrangement and at least one holding device for fixing the sub-cells on the planar carrier element
10 or elements. Each back-side contact arrangement and each front-side contact arrangement corresponds to a back-side or front-side contact, respectively, of one of the sub-cells. Either the back-side contact arrangements of the individual sub-cells can be electrically contacted separately, while the front-side contact arrangements of all the sub-cells are electrically connected to a common front-
15 contact arrangement and can be contacted with a common front-side potential, or the front-side contact arrangements of the individual sub-cells can be electrically contacted separately, while the back-side contact arrangements of all the sub-cells are electrically connected to a common back-contact arrangement and can be contacted with a common back-side potential. With the
20 aid of the contact device, multiple sub-cells can be electrically characterised at the same time during a lighting operation or one after the other during successive lighting operations.