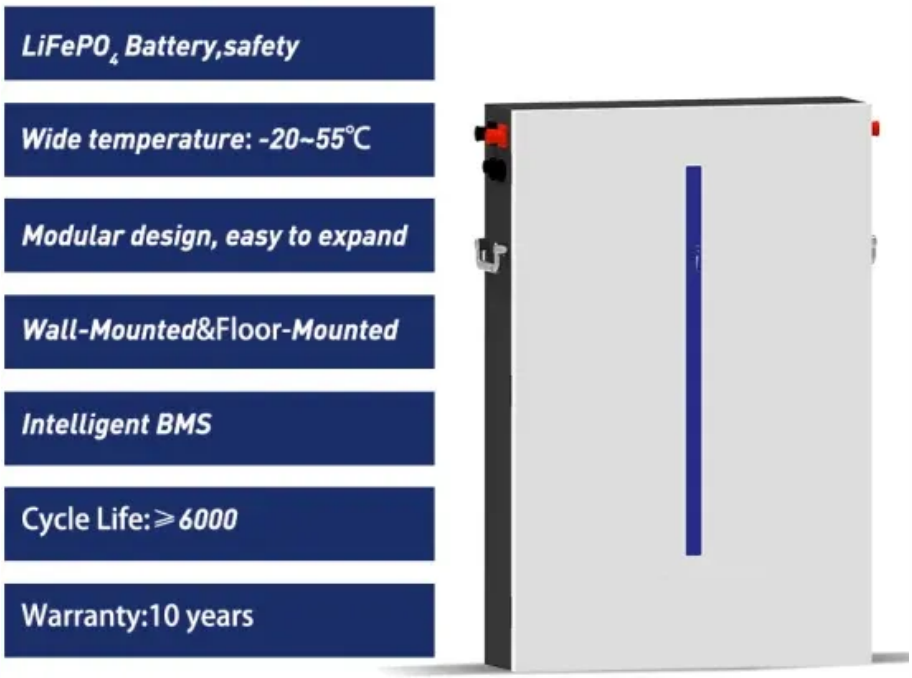
Solar Energy South Africa

Photovoltaic support grounding system



Overview

Section 690.41 covers system grounding, allowing both grounded and ungrounded PV array conductors. Both types of systems require ground-fault detection on the PV source and output circuit conductors [690.5 and 690.35(C)] with one very restrictive exception. The only PV system that would not require ground-fault.

Equipment grounding requirements for PV systems are covered in 690.43. These requirements include the bonding and grounding requirements for exposed metal parts of PV systems such as metallic module frames, electrical.

Sections 690.45 and 690.46 cover the sizing and protection of EGCs within a PV array. Since nearly all PV systems are required to have ground.

The last issue related to grounding electrode systems in the 2014 NECis Section 690.47(D), Additional Auxiliary Electrodes for Array Grounding. This section requires that an auxiliary array electrode be installed on.

Section 690.47 covers the requirements for grounding electrode systems in PV systems. This section has seen many changes over the 30 years that Article 690 has been in the NEC (yes, Article 690 was introduced in the 1984.

Photovoltaic support grounding system

Large utility-scale photovoltaic solar power plant grounding system

This paper presents basic guidelines on design considerations for large utility-scale photovoltaic (PV) solar power plant (SPP) substation and collector grounding systems for safety aspects. ...

What is the process of grounding and bonding a ...

A number of factors make the grounding and bonding of a PV system difficult. PV systems are exposed to the elements, which can result in atypical situations where the usual practices for bonding may not perform as ...

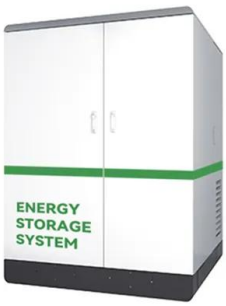
Solar Farm Earthing Design and Modelling Guide

How to design and model earthing systems for a solar PV farm to the latest practices and standards. Soil resistivity, fault levels, and touch voltages are covered. Call Us: 1300 093 795 along with the above-ground ...

Effective Grounding for PV Power Systems

Effective grounding in photovoltaic (PV) systems is the creation of a low-impedance reference to

ground at the AC side of the inverter--or group of inverters--that is designed to be compatible with the distribution network's ...



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