

Photovoltaic Switch Module



AI Overview

A Photovoltaic Switching Module is a DC switch device designed to safely control, disconnect, and protect solar PV modules and associated DC circuits in photovoltaic systems.

Overview

A Photovoltaic Switching Module, often referred to as a PV DC switch or DC disconnect, is an essential component in solar power systems. It allows operators to safely switch, isolate, and protect photovoltaic modules, inverters, and other DC loads. These modules are critical for both grid-connected and off-grid PV systems, ensuring operational safety and compliance with electrical standards such as IEC 60364-7-712 and the National Electrical Code (NEC) Section 690.5(A) .

Key Functions

- **Switching and Isolation:** Enables safe disconnection of PV modules or strings from the inverter or grid for maintenance or emergency purposes .
- **Protection:** Prevents damage to equipment and reduces risk to personnel by interrupting high-voltage DC circuits, which require special design considerations due to the absence of zero-crossing in DC current .
- **Efficiency and Reliability:** High-speed operation and long service life improve system efficiency and reduce maintenance costs .
- **Environmental Considerations:** Modern PV switches are designed to be environmentally friendly, minimizing the ecological impact during production and use .

Article Content

Dec 29, 2025

Photovoltaic module

Photovoltaic modules are made up of a mosaic of solar cells. Here is a description of their main features and of Enel Green Power's

Mar 26, 2026

Solar Transfer Switch Explained: How an ATS Works in

Learn how an automatic transfer switch (ATS) works in solar and battery systems. Discover how Tongou's

Aug 20, 2025

Photovoltaics and electricity

Solar photovoltaic (PV) cells, PV modules (panels), and solar PV arrays for electricity generation.

Apr 16, 2026

Photovoltaics Report

Zielsetzung des Reports Ziel des »Photovoltaics Report« ist es, aktuelle, faktenbasierte Informationen zum PV-Markt in

Dec 23, 2025

20 Solarmodule im Test und Vergleich (2026)

Es gibt hunderte Hersteller und noch mehr Modelle von PV-Modulen auf dem Markt. Die Auswahl fällt daher schwer.

Nov 18, 2025

Modulwechselrichter für PV-Module: Vor

Ist eine Photovoltaik-Anlage häufigem Licht- und Schattenwechsel ausgesetzt, so kommen herkömmliche

Nov 10, 2025

Solar panel

A photovoltaic system typically includes an array of photovoltaic modules, an inverter, a battery pack for energy storage, a charge

Oct 20, 2025

Konrak Solar PV DC Switches: Reliable Renewable Energy Solutions

Solar PV DC Switches Photovoltaic DC switches are DC switch devices specially designed for photovoltaic power generation

Aug 26, 2025

Photovoltaik

Bei unbeschädigten Modulen besteht keine Gefahr der Emission von Schadstoffen.
Ein Projekt der Universität

Nov 25, 2025

Amazon : Photovoltaic Switch

Explore outdoor lighting control with photocell sensors. Automatic on/off switches designed for entrances, parking lots, and

Nov 14, 2025

PRICE INDEX | June 2026

PRICE INDEX | June 2026 Photovoltaic Price Index Every month we publish a current price index on the development of wholesale

May 08, 2026

PV-Module | Hochwertige Auswahl & Top-Preise

Große Auswahl an PV-Modulen: JA Solar, Jolywood, Trina, Aiko Geprüfte Qualität, Top Preise & schneller

Jan 11, 2026

Electrical performance of a fully reconfigurable series-parallel ...

In this work, we analyse the outdoor performance of a full-scale prototype of a series-parallel photovoltaic module with

Dec 04, 2025

Photovoltaic relays

Our photovoltaic relays (PVR) are remotely controlled switches (on/off) with complete galvanic isolation from input to output.

Sep 17, 2025

Konrak Solar PV DC Switches: Reliable Renewable

Photovoltaic DC switches are DC switch devices specially designed for photovoltaic power generation

Jun 01, 2026

DC disconnects for 600VDC solar photovoltaic installations ...

Eaton's new offering of PV switches have multiple poles factory-wired, and they are approved for NEC Article 690 applications right

Feb 01, 2026

Solar photovoltaic DC switch-disconnector selection and configuration

Discover how to select and configure DC switch-disconnectors for solar PV systems, including key safety criteria, performance

Jan 14, 2026

Solar panels

Solar panels, or photovoltaics (PV), capture the sun's energy and convert it into electricity to use in your home. Installing solar panels

Feb 14, 2026

Solar-Umschalter, PV-Umschalter: 2 auf 1 oder 1 auf 2 umschalten

Vorab-Info: Wir bieten neben diesem Umschalter noch weitere Ausführungen an, z.B. mit automatischer Umschaltung nach

May 15, 2026

Selection & reference guide Solutions for photovoltaic ...

This offering includes DC rated switches 16-630 A IEC and 28-400 A UL. For the AC side of solar circuits, ABB's standard UL fusible

Oct 22, 2025

DC & PV Switch disconnectors

Photovoltaic load break switches specially designed to protect the DC part of a solar panel installation.

Sep 16, 2025

Low Voltage Products Switches Applications in photovoltaic systems

By providing switch-disconnectors with strong dielectric capability, maximizing clearances and creepage distances while minimizing

Jul 02, 2026

SecondSol

SecondSol Marktplatz für Photovoltaik: neue und gebrauchte Solarmodule, Wechselrichter, Speicher und Dienstleistungen.

Jun 26, 2026

Solar Disconnect Switch Guide: Types, Installation

Complete guide to solar disconnect switches including AC/DC types, sizing, installation

Mar 03, 2026

Cells, Modules, Panels and Arrays

Photovoltaic cells are connected electrically in series and/or parallel circuits to produce higher voltages, currents and power levels.

Contact Us

For more information, pricing, or custom solutions, please contact us:

Website: <https://ntmmgroup.co.za>

Email: sales@ntmmgroup.co.za

Phone: +27 82 471 2596

Address: Unit 7, Optic Park, 24 High-Tech Lane, Century City, Cape Town, 7441, South Africa

This document is for informational purposes only. Specifications subject to change without notice.

