Product Brief

Modules for Photovoltaic String and Multi-String Inverters

We introduce an all-new family of tailor-made modules for photovoltaic (PV) string and multi-string inverters. Now, optimised inverters offering optimized inverter efficiency and performance. Fast and solderless assembly is possible using the proven PressFIT technology. Reliability at the highest level was a clear focus during development. Solutions are available for single-phase and three-phase photovoltaic inverters.

Single-phase Photovoltaic Modules

An entire PV inverter can be realized by using a single Easy 2B module. The modules incorporate an H bridge as well as a booster and a bypass diode. These modules are suitable for PV inverters with:

- High max. DC voltages, as 650 V chips are used
- Wide input voltage range, as a booster is included
- Efficiency: approx. 97%
- Reactive power capability

Advantages:
- Excellent price/performance ratio
- Single standard topology
- Same mechanical layout for 50 A and 75 A module
- 650 V IGBTs / diodes / MOSFET / SiC Schottky diode

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<thead>
<tr>
<th>Sales name</th>
<th>Sales product number</th>
<th>Package</th>
<th>Description</th>
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<tr>
<td>F4-50R07W2H3_B51</td>
<td>SP000908430</td>
<td>Easy2B PressFIT</td>
<td>Integrated Booster / Inverter Module (1–4 kVA)</td>
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Key features

- Modular solution tailored for most inverter designs
- Excellent efficiency and performance
- High max. DC voltages achievable
- Wide input voltage range, as boosters are included
- Reactive power capability is supported
- Simple assembly due to PressFIT pins (solderable)

Applications

- Single-phase photovoltaic inverters
- Three-phase photovoltaic inverters

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Three-phase photovoltaic modules

Booster modules and converter modules are available. These modules are suitable for PV inverters with:

- Max. DC input voltage: 1000 V
- Max. efficiency: 98% + x
- Output power up to: 50 kVA

### Inverter modules

**Advantages:**

- Excellent efficiency and performance
- Reactive power capability of PV inverter is supported
- Phase leg module for applications up to 50 kVA

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### Booster modules

**Advantages:**

- Excellent efficiency and performance
- Reactive power capability
- Fully integrated module for 3-phase applications up to 9 kVA
- Improved switching losses vs. existing NPC1 modules

### Inverter modules

**Advantages:**

- Excellent efficiency and performance
- 3 module types with SiC diodes available (F version)
- Up to four MPP trackers possible using one module

### Booster modules

**Advantages:**

- Excellent efficiency and performance
- Reactive power capability
- Phase leg module for applications up to 50 kVA

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